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EXPLORING INCENTIVES:

PROMISING STRATEGIES FOR IMPROVING GIRLS' PARTICIPATION IN SCHOOL

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Prepared by:
Cynthia J. Prather

with

Islam Balouch
Carl Monde
Eugenia Monterroso
Taufiqur Rahman

Submitted to:
ABEL Project
Creative Associates International, Inc.
5301 Wisconsin Avenue, NW - Suite 700
Washington, DC 20015

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ACRONYMS

ACDI	Agence Canadienne pour le Développement International (Canadian Agency for International Development)
AGES	Guatemala Association for Family Life Education
AKU	Aga Khan University
BEST	Basic Education Strengthening Project
BND	Office of Nutrition and Development
CAII	Creative Associates International, Inc.
CECI	Centre d'Étude de Coopération Internationale (International Studies and Cooperation Centre)
CEDPA	Centre for Development and Population Activities
CHREPORF	Centre Haïtien de Recherches pour la Promotion Féminine (Haitian Center of Research for Promotion of Women)
CINEC	Centres Intégrés de Nutrition et d'Education Communautaires (Integrated Center of Nutrition and Education of the Community)
DEO	District Education Officer
FESP	The Female Education Scholarship Program
GNP	Gross National Product
GOS	Government of Sindh
LC	Learning Coordinator
NGO	Non-governmental Organization
NORAD	Norwegian Aid
NWFP	North Western Frontier Province (one of the four provinces in Pakistan)

ODA	Overseas Development Administration
PAH	The Humanitarian Assistance Program
PEDP	Pakistan Primary Education Development Program
PEM	Protein Energy Malnutrition
PEP	Primary Education Project
PRONEBI	Programa Nacional de Educación Bilingüe Intercultural (National Program of Bilingual-Intercultural Education)
READ	The Rural Education and Development Project
SEMIS	The Sindh Education Management Information System
SPES	Supervisors of Primary Education
UNDP	United Nations Development Programme
UNESCO	United Nations Educational, Scientific, and Cultural Organization
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
WDC	The Women's Development Center

I. INTRODUCTION

Exploring Incentives: Promising Strategies for Improving Girls' Participation in School, presents various incentive programs that have been used to increase girls' enrollment, attendance, and performance in primary school and the contexts in which they have been implemented. It includes individual case studies about programs implemented in Latin America and Asia and follow-up discussions/reflections about those programs. Reporting the findings concerning the use of incentives may spur more careful consideration of this relatively new approach to improving girls' educational participation. Lessons from the case studies may help guide program development and enrich other incentive research, not just in Latin America and Asia, but wherever improvements in girls' education are needed.

Certainly, new approaches can be beneficial. Although worldwide efforts to provide universal education are having an impact, overall progress and regional figures mask continuing needs and gender disparities. In 1990, two thirds of the 300 million children who did not have access to primary or secondary education were girls (UNICEF 1992). Significant gaps between girls' and boys' educational participation at the primary and secondary levels still exist. For example:

- In South Asia, the 1990 estimated gross enrollment ratio for girls (75 percent) is more than 25 percent lower than the estimated gross enrollment ratio for boys at the primary level (100.8 percent) and almost 40 percent lower for girls (28 percent) than for boys (48 percent) at the secondary level.

- Since 1970, the gap in school enrollment at the primary level between boys and girls has actually widened in Afghanistan, Nepal, and Pakistan (UNESCO 1991).

- In four Central American and Caribbean countries (El Salvador, Haiti, Honduras, and Nicaragua), fewer than 50 percent of the girls enrolled in primary school reached the final grade (UNESCO 1991).

In certain contexts, *incentives*—something used to modify the behavior of individuals or groups of individuals in the interest of achieving a particular goal (Chapman, Snyder, and Burchfield 1993)—may help to reduce the disparities and improve the educational situation for girls. This research explores the use of several kinds of incentives and the contexts in which they have been used.

Why Are Incentives Being Used to Improve Girls' Participation?

To overcome the physical, economic, and socio-cultural barriers to girls' educational participation, a variety of initiatives including but not limited to free schooling and school construction have been used to increase the *supply* of school places and have benefitted boys and girls. Other interventions, including fee waivers, "girl-friendly" physical facilities, the hiring and training of more female teachers, gender-sensitive classroom practices, and flexible scheduling have been initiated to improve girls' enrollment, retention, and completion in primary and secondary school by increasing the *demand* for girls' education. The use of incentives is another strategy to increase the demand for girls' education by providing an added impetus to girls and/or their parents who are not sufficiently motivated by any existing supply-side or demand-side interventions.

Incentives can serve different functions. An incentive can be a "reward"—something of value that is given when the desired behavior is performed and/or withheld when it is not. Reward-based incentives can take many forms—from money or other tangible items to symbolic rewards such as stars, certificates, or points, and nontangibles such as special privileges or public recognition (Kohn 1993).

In the context of international education, the term "incentive" more often is used to describe a form of compensation—whether monetary or nonmonetary—that fulfills a need or minimizes an opportunity cost so that a desired goal can be achieved. Scholarships, for example, have been used as incentives in Guatemala, India, and Nepal to increase girls' participation in school. The supply of books, required uniforms, or basic school materials also has been included in this category.

For this paper, rewards and compensation are considered educational incentives if they have been provided to the parents and/or their daughters to motivate further participation in school.

But Don't Incentives Have Their Limitations?

The use of incentives to modify behavior change may have its limitations. Kohn (1993) for example, states that stars, points, and other rewards are not desirable because the behavior change is based on some extrinsic reward rather than on internal gratification, satisfaction in successfully completing a particular goal or task, or any attempt to address the reasons why the behavior was not demonstrated in the first place. Thus, when the reward disappears, Kohn argues, the behavior often disappears as well. Kohn further argues that even continuation of the reward is often not enough because, although initially motivating, the reward's value diminishes as people come to expect it. Incentives, then, may bring about short-term behavior but not lasting change.

In addition, in an article concerning the use of incentives to improve teacher attendance and classroom instruction in Botswana, Chapman, Snyder, and Burchfield (1993) offer two cautions:

- The incentive value of any particular reward is relative to the context in which it is offered. Things that motivate under one set of cultural, economic, and professional conditions may not do so in another; and

- Within a given country, the search for incentives is a continuing process, as the motivational power of the reward diminishes with widespread distribution. Once the reward becomes standard practice, its value drops, eventually moving from a "special reward" for special performance to "an expected condition...(p. 315).

Although this research focused on teacher attendance, there may be some similarities in the usefulness of incentives in other educational contexts. Issues raised by Kohn, Chapman, and others will be explored as the incentive program data are analyzed.

Exploring Incentives: Development and Organization

The investigation began with a review of research on incentive programs. Project staff collected and reviewed USAID and other donor documents, interviewed technical experts, and queried ministers of education to identify incentive programs. In selecting programs for inclusion, CAII searched for programs with a minimum of two years of program operation and evidence of some positive result on girls' participation in education, as well as for regional representation, a balance of different kinds of incentive programs, and the inclusion of USAID-funded and non-USAID-funded programs.

Although this research was not exhaustive, what became increasingly clear is that the use of incentives to improve educational participation is a relatively new approach in developing country contexts, particularly the regions targeted for this effort[1]. Many programs appear to be in their infancy or have been implemented on a small scale with a particular population. Most are too new to have had impact evaluations. In other cases, incentives have been included as one small component of an overall, comprehensive strategy. Data are sketchy and difficult to isolate. In many ways, the information presented here breaks new ground and provides insight on which further dialogue can be built.

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[1] One known study of educational incentive programs, which is being funded by USAID, focuses on incentive programs in Africa. The final product will be an analytical study of experience with incentive programs, with major emphasis on the "how-tos" of planning, implementing, and evaluating incentive programs as a means of reaching disadvantaged populations.

Four programs are featured in the document:

- The Guatemalan Association for Family Life Education (AGES) Scholarship Program (Guatemala);
- The Female Education (Secondary level) Scholarship Program (Nepal);
- The Humanitarian Assistance Program (Haiti); and
- The Sindh Primary Education Development Program (Pakistan).

A summary of the selected programs is provided in Figure I.1. Major social and educational indicators for each of the countries represented are provided in Figure I.2. Indicators include per capita income, percent of the population that live in rural areas, the presence of compulsory education, the presence of free education, female literacy rate, female primary school gross enrollment rate, and female secondary school gross enrollment rate. The percent of the population that lives in rural areas is particularly important because in the majority of the developing countries, the gap in girls' and boys' primary school enrollment rates in rural areas is even greater than the gap in primary school enrollment rates for urban boys and girls.

In each country, a researcher who is currently working or formerly worked with the program was contracted to prepare a case study of the profile of the content and program. The local researcher located and reviewed relevant documents, interviewed administrators, parents, teachers, and students, and observed instructional activities and student participation where the incentive program was or is being implemented. Washington-based staff developed the case study outline and reviewed and edited preliminary case study drafts. Although somewhat dependent on the available data and the varied backgrounds of the case study writers, this approach provided a *field-based perspective* and resulted in the inclusion of real program experiences.

Figure I.1
Summary of Case Study Incentive Programs

Program Title	Incentive	Region	Type of Participation Addressed*	Constraints Addressed	Funding/Supporting Organizations	Gender Specific
Guatemalan Association for Family Life Education (AGES) Scholarship Program (Guatemala)	Scholarships	Latin America	Primary school enrollment Primary school attendance	Poverty/cost of school Early marriage Parental attitudes Cultural isolation	USAID Guatemalan Association for Family Life Education (AGES)	Yes
Female Education Scholarship Program (Nepal)	Scholarships	Asia	Primary school completion Secondary school enrollment Secondary school completion	Poverty/cost of school Economic loss Parental attitudes	USAID The Asia Foundation Women's Development Center (WDC)	Yes
Humanitarian Assistance Program (Haiti)	Free meals	Latin America	Primary school enrollment Primary school attendance	Poverty/cost of school Parental attitudes	Canadian Agency for International Development Canadian Center for Studies and International Cooperation	No
Sindh Primary Education Development Program (Pakistan)	Packages: (Various interventions, including school construction, teacher training, materials development/distribution, scholarships, free textbooks, free meals)	Asia	Primary school enrollment Primary school attendance Completion	Poverty/cost of school Economic loss Parental attitudes	The World Bank (IDA) Norwegian Agency for Development Cooperation (NORAD) Overseas Development Administration (ODA) Government of Sindh	Yes

* Educational participation can incorporate one or more of the following: enrollment, attendance, and completion at the primary and secondary levels.

Figure I.2
Case Study Countries: Major Social and Educational Indicators[2]

Indicator	Country			
	Guatemala	Nepal	Haiti	Pakistan
Per Capita Income (in US$)	$920	$170	$400	$370
% Rural	58%	90.4%	69.7%	68%
Compulsory Education	6 yrs	5 yrs	6 yrs	none
Free Education	1st grade - high school[3]	1st grade - 9th grade[4]	Tuition required for all grades	1st grade - 10th grade
Female Literacy Rates	47.1%	13.2%	47.4%	21.1%
Female Primary School Gross Enrollment Rate*	71%	57%	80%	28%
Female Secondary School Gross Enrollment Rate*	20%	17%	20%	12%

*The gross enrollment ratio is the total enrollment in the given level, regardless of age, divided by the population of the age group that officially corresponds to that level of schooling.

[2] Unless otherwise indicated, statistics are taken from UNESCO, *World Education Report 1991.*

[3] Registration fee is required.

[4] Rahman 1996.

The remainder of this document is organized into five chapters. Chapters II, III, IV, and V focus on the incentives described in this paper: scholarships at the primary level; scholarships at the secondary level; school feeding programs; and incentive packages. Each chapter includes an overview, a case study, and a discussion of the case study findings.

The case studies themselves are descriptions of programs being implemented in a developing country in Asia or Latin America as summarized by the local case study writers and as reported in research documents. Each case study addresses three questions:

- In what context has the particular incentive program been implemented?
- What are the key features of the incentive program?
- What outcomes/results related to girls' school participation were evident from program implementation?

Chapter VI includes the author's reflections on the case study findings and conclusions that were drawn as a result of the analysis.

II. SCHOLARSHIP PROGRAMS AT THE PRIMARY LEVEL: BUILDING PARTICIPATION DURING THE EARLY YEARS

GUATEMALA

SCHOLARSHIP PROGRAMS AT THE PRIMARY LEVEL: AN OVERVIEW

Scholarships—gifts of money or other aid to help a student continue his/her studies—have been used to minimize or eliminate direct and opportunity costs as a major barrier to girls' education.

During the 1960s and '70s, many developing countries eliminated primary school tuition charges with the introduction of universal and compulsory education, thereby eliminating a major school expense for girls, boys, and their families. These changes contributed to increased enrollments for girls and boys in Kenya, Tunisia, Indonesia, India, Sri Lanka, Ghana, Zimbabwe, and Malawi (Tietjen 1991). In Kenya, for example, girls' primary enrollment increased by 40 to 50 percent, and in India boys' and girls' enrollment doubled. Despite the elimination of tuition charges, other costs such as registration fees, books, uniforms, school supplies, recreational and activity fees, exam fees, and transportation still make school prohibitive for poor parents. School fees account for 10 percent of household consumption in least developed countries and as much as 20 percent in some poor families (Herz et al. 1991).

Although both boys and girls are kept out of school by their parents because of prohibitive school fees, girls are more likely to be left out because parents perceive that the opportunity costs for educating girls is higher than the opportunity costs for boys. Low-income families depend upon daughters to perform domestic labor, which then enables the mother to engage in remunerative work. By sending girls to school (Herz et al 1991), the family loses income that the mother might have earned. Since the value of girls' education is often measured in terms of increased productivity and earning capacity (Kelly 1987; Teitjen 1991), education that does not prepare girls to be better producers at home is commonly not highly valued. In societies where girls marry and bear children in their early teens, significant investments in their education are considered unnecessary (Moore 1996).

Scholarship funds can be disbursed in a variety of ways. For example, stipends can be deposited in a bank account in the girl's name to be withdrawn by the girl and her teacher when money is needed, as in Bangladesh, or given to the girl's family to be used as it chooses, as in Guatemala. Scholarships also can be targeted to motivate particular groups or to improve a particular aspect of girls' participation. For example, a scholarship program in India, which is intended to increase enrollment, targets lower socio-economic groups.

The following case study presents one particular scholarship program for primary level girls: The Guatemalan Association for Family Life Education (AGES) Scholarship Program. This case study shows how scholarship programs can be used to attract young girls and families in rural communities who are isolated from the mainstream society by location, language, and culture.

CASE STUDY: ASOCIACIÓN GUATEMALTECA DE EDUCACIÓN SEXUAL (AGES) SCHOLARSHIP PROGRAM

Summary Information

Country:	Guatemala
Dates:	1986-Present
Sponsoring Agency:	USAID/Guatemala through *Asociación Guatemalteca de Educación Sexual* (The Guatemalan Association for Family Life Education Program), or AGES (1986-1992) Embassy of the Netherlands (1992-1995) CEDPA (1996)
Incentive Used:	Scholarship and community support assistance for girls in primary school
Target Group:	Mayan girls between the ages of seven and fifteen years who have never attended school or are among the most needy in the community

COUNTRY CONTEXT

Guatemala, a Central American country of almost 10 million inhabitants, is a nation with marked disparities in its social landscape—disparities between the rich and the poor, powerful and weak, white and Indian, urban and rural, men and women.

Less than three percent of land owners possess 65 percent of all arable land. In a nation largely dependent on agricultural production, this concentration has contributed to differences in income between landowners and non-landowners (Tierney 1995). Half of Guatemala's population consists of more than 21 Mayan groups, the great majority of whom live in rural areas with the highest indices of poverty. The most extreme cases, the North (Alta and Baja Verapaz) and Northwest (Huehuetenango and El Quich) regions of the country have the highest indices of poverty in the nation—90 and 92 percent respectively. The largely Ladino (nonindigenous) population, which comprises most of the metropolitan area, has the lowest rate of poverty—64 percent (INE 1993). The national per capita income is equivalent to US $920 (UNESCO 1991).

Figure II.1
Guatemala: Major Social and Educational Indicators[1]

Indicator	Country			
	Guatemala	Nepal	Haiti	Pakistan
Per Capita Income (in US$)	$920	$170	$400	$370
% Rural	58%	90.4%	69.7%	68%
Compulsory Education	6 yrs	5 yrs	6 yrs	none
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Female Primary School Gross Enrollment Rate*	71%	57%	80%	28%
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[1] Unless otherwise indicated, statistics are taken from UNESCO, *World Development Report 1991.*

[2] Registration fee is required.

[3] Rahman 1996

Guatemala is a country of diverse cultural, ethnic, and linguistic groups. The indigenous population includes speakers of 22 distinct languages and more than 100 dialects, as well as the Garifuna language. Although there is considerable variation among Mayan ethnic groups, in general Mayan traditions and values are centered on four themes: the community as a whole, rather than the family; education for life; the elders as a source of advice and wisdom; and the connection of people to the land and nature (as they live fundamentally from agriculture). Mayan dress is also unique. In contrast, the culture of the Ladino people is more typical of western society. Their values and attitudes are based more upon the extended family.

For decades, military dictators were the sovereign government authorities. A CIA overthrow in 1954 resulted in decades of civil unrest, with a succession of military presidents. Although a civilian government was elected in 1985, the more than 30 years of civil strife did take its toll. Thousands of people were killed or went into exile, especially in the highlands, where most of the conflict took place.

Status of Women

Guatemalan society imposes rigid gender roles, where men work for a wage outside the household and women are expected to care for the home and children. High rates of rural to urban migration, marital abandonment, single parenting, and male mortality due to the civil war, however, have contributed to a change of traditional roles and the woman's need to work for wages. Nevertheless, only 32 percent of women work in the formal sector.

As in most cultures, preserving the health of their children is one of the significant responsibilities of women in Guatemalan society. Female education appears to have a significant, beneficial impact on age of marriage and family planning as well as the survival and health of Guatemalan children. There is a difference of four years at the age of marriage between illiterate women and women with at least some secondary education—16.9 and 20.9 years of age, respectively (Nuñez et al. 1991). Family planning is practiced by a significantly higher number of women with secondary studies than women with minimal education. Education of the mother also is closely related to the use of prenatal care. In rural areas, only 15 percent of mothers without formal education receive prenatal care, but more than 80 percent of mothers with secondary schooling receive it (Nuñez et al. 1991). In addition, the rate of infant mortality for children of women with minimal education (80-85/1,000 live births) is double that experienced by women with secondary schooling (40/1,000 live births). Similar trends emerge when examining health prevention services, such as vaccination, child growth, and development monitoring.

Despite the potential benefits of female education, Guatemala has one of the highest national female illiteracy rates in the western hemisphere and the second highest illiteracy rate in Latin America (UNICEF 1995). Of the country's more than 2.7 million illiterates—59 percent of the total population—60 percent are women. Forty-six percent of Guatemala's women (almost 1.4 million) have received less than one year of formal education (Nuñez et al. 1991). Fewer girls than boys finish any grade of elementary or secondary school.

The number of educated women is especially low in rural areas, where about 80 percent of the women are illiterate and 43 percent of girls enroll in school. In rural areas, only one out of eight girls who enroll in school completes the sixth grade (Nuñez 1993).

Educational System

The formal public educational system offers six years of elementary school, three years of basic secondary school, and three additional years of secondary school. Elementary school is compulsory, and all levels of schooling are free. Spanish is the official school language. The education system is relatively inefficient, with approximately 50 percent of first grade students repeating the grade and the average enrollee taking 11.4 years to graduate from the sixth grade. Only 51 percent of children who enroll in school complete grade six (Clay 1994).

Guatemala's formal education system reflects more the Ladino, western culture (National Commission on Girls' Education 1991) than the traditional practices of the indigenous peoples in Guatemala. The government traditionally has given low priority to the provision of services to the Mayan population, and little money or effort is allotted to specialized human and material resources for Mayan educational needs. With Spanish as the language of instruction, Mayan children and parents often have difficulty communicating with school staff or understanding what is being taught. For parents who insist that their children dress in traditional attire, the Ministry of Education school uniform requirement often results in daughters who do not attend school. With USAID funding and technical assistance, the Ministry of Education initiated the long-term development of the National Program of Bilingual-Intercultural Education (PRONEBI) in the early 1980s to provide educational services to monolingual Mayan-speaking children in Guatemala's rural areas. PRONEBI has trained a cadre of bilingual teachers and has developed a full bilingual curriculum, a range of instructional materials, and teacher training programs in each of the four major Mayan languages spoken by 82 percent of the Mayan-speaking population.

Barriers/Constraints to Girls' Education in Guatemala

Barriers to girls' education, which have been identified and examined during the last five years by agencies interested in designing strategies to overcome them (National Commission on Girls' Education 1991), can be divided into five areas: infrastructural barriers; education system barriers; household/ family resource barriers; cultural barriers; and health/nutritional barriers (see Figure II.2). Barriers appear to be particularly significant in rural areas. Although rural girls make up 36.5 percent of the nation's school-aged population, only 11.8 percent of the sixth graders are rural girls (Nuñez et al 1991). These barriers combine to discourage the demand for girls' education.

Illustrative Efforts to Improve Girls' Education

USAID has continually provided funding and technical assistance in basic education to the Ministry of Education in Guatemala over the past 20 years. In 1985 and 1988, in preparation for the support of a new basic education reform effort (Basic Education Strengthening [BEST] Project, 1989-1997), USAID conducted two assessments: one of the education sector (Academy for Educational Development 1985), and the other of the

primary education subsector (Academy for Educational Development 1988). The assessments documented a range of problems in the education system in Guatemala, such as the persistently high rates of school dropout and the low rates of school retention among rural girls. Based on this information, USAID initiated a systematic study of the issue of girls' education in Guatemala in 1989, which evolved into a full-scale national initiative for girls' education that is now supported by a range of Guatemalan public- and private-sector institutions as well as international organizations. Two initial efforts by USAID to address the problem of girls' education in Guatemala are described below.

The BEST Project

The purpose of the BEST Project is to improve the quality, efficiency, and equity of basic education services in Guatemala. In the original design of the BEST Project, before USAID had engaged in the systematic study of girls' education in Guatemala, girls' education concepts and issues were to be integrated into each of the project's 16 activities. Later, with the findings from a series of studies in hand, the Project was amended to include a girls' education activity, which supported a range of actions, including the development of a training program on girls' education for Ministry of Education officials and teachers, the development of girls' education motivational materials (teachers' guide, girls' education literature, original motivational songs, and flip chart story programs), and the implementation of a pilot girls' education project (Educate Girls!) to test a number of packages of girls' education interventions.

National Meeting

In January 1991, following a year of high-level meetings with senior public- and private-sector decision makers, USAID co-sponsored a National Meeting, "Educating Girls: Achieving the Development of Guatemala," in which key decision makers were presented with the findings on the relationship of girls' education to the country's social and economic development. At the close of the Meeting, participants proposed the formation of a National Commission on Girls' Education and nominated 12 leaders from Guatemala's public and private sectors to serve on the Commission. The participants also charged the Commission with two major tasks: the development of a national plan of action on girls' education, and the implementation of a national public awareness campaign (Clay 1991).

In 1994, the Commission earned legal recognition as the Guatemalan Association for Girls' Education (Asociación Eduquemos a la Niña). The objective of the Association was "to promote the social and economic development of Guatemala by fostering, coordinating, monitoring, and evaluating actions to ensure that girls complete a minimum of six years of formal primary school education." Following the publishing of the national assessment on girls' education, as well as the national plan of action, the Association coordinated a wide range of programs, including the "Educate Girls!" pilot project, co-funded and implemented by the Foundation of Sugar Producers; the "New World for Girls" project (Un Mundo Nuevo para la Niña), a national social marketing program funded and conducted by the Central American Brewery; publicity efforts and fund raising led by prominent business owners; and other programs and projects conducted by indigenous non-governmental organizations, the Ministry of Education, and other donors.

Figure II.2
Barriers to Girls' Primary Education in Guatemala

Infrastructural Barriers	Education System Barriers	Household/Family Resource Barriers	Cultural Barriers	Health/Nutritional Barriers
Distance from home to school	Curriculum and instructional strategies that do not address girls' learning needs	Direct costs to families of clothing and shoes	Gender and cultural stereotypes	Stunted growth leading to late enrollment in primary school
Absence of roads and safe transportation to school	Lack of female teachers	Direct costs to families of books and school supplies	Personal security of girls while walking to school and while in school	
Inadequate basic services in communities (e.g., water, electricity)	School schedule/calendar conflicts with girls' domestic and market responsibilities	Indirect costs to families of girls' domestic labor (e.g., caring for younger siblings, fetching wood and water)	Early marriage of girls	
Inadequate basic services in schools (e.g., latrines)		Lack of knowledge of the social and private benefits of girls' schooling	Differential treatment of girls (e.g., poor nutrition and health care)	

Summary

Guatemala is a low-income country with a rural population largely excluded from the formal educational system and a myriad of supply-side, language, and cultural barriers discouraging Mayan girls' participation, but with growing national recognition of the importance of girls' education, particularly for the indigenous population. In this context an incentive program for primary school-level girls was initiated.

AGES PROGRAM DESCRIPTION

Background

The Guatemalan Association for Family Life Education Program (Asociación Guatemalteca de Educación Sexual, literally translated as Guatemalan Association for Sex Education), is a private, nonprofit organization established in 1978 to provide sex and human development education to the general public. In 1986, as a part of a large family planning project, USAID provided funding to AGES to initiate a small girls' scholarship program as a family planning intervention. The purpose of the program was to increase girls' school retention as a means of postponing early marriage and of reducing the high incidence of early pregnancy among rural, indigenous adolescent girls. USAID provided full funding for the program, which included administrative and program costs, from 1986 through 1991.

AGES unsuccessfully attempted to attract local public- and private-sector institutions to fund the program and expand its coverage and thus its impact. With little promise of sustainability, USAID terminated funding in 1991. From 1993 to 1995, on a significantly smaller scale, AGES received funding support from the Embassy of the Netherlands. In 1996, AGES was funded by the Centre for Development and Population Activities (CEDPA) (Monterroso 1996).

Key Features

The AGES scholarship funds consists of a monthly stipend, or scholarship, of approximately US$4 for Mayan girls (ages seven to fifteen years) who have never attended school or are among the most needy in their community. As scholarship recipients, the girls enroll in and attend primary school. If they maintain the attendance and other requirements, they continue to receive the scholarship through primary school. In accepting the scholarships, parents agree to allow their daughter time for homework and for tutoring if individual progress requires it. Parents also agree not to allow their daughters to work for money after school (Nieves, Lundgren, and Bezmalinovic 1994).

Four program activities support and are integral to the scholarship disbursement: a carefully planned selection of communities for the program; the involvement of the communities in selecting the candidates and implementing the program; the regular involvement of a promoter, who made visits to the girls, teachers, and homes, and provided academic and emotional support; and the inclusion of human development and sex education training.

Selection of Participating Communities and Program Initiation

Community participation is integrated from program inception so as to tailor the program to community needs, develop a sense of ownership, and build the local potential to assume program direction and implementation. Community representatives approve the program before it is implemented and then participate actively in selecting the recipients and monitoring the progress.

Communities selected for the AGES girls' scholarship program are located in a rural, indigenous area of Guatemala and have the following:

- a complete PRONEBI primary school, with all six grades and one teacher for each grade in operation;
- civil and judicial authorities who were legitimately appointed, were respected, and demonstrated community organization;
- community acceptance of the program; and
- a population of at least 450 school-age children (Nieves, Lundgren, and Bezmalinovic 1994).

PRONEBI local supervisors cooperate with AGES in providing a list of potential communities. The supervisors and AGES staff then conduct a series of meetings in each potential community, first with the school principal and teachers, and later with local authorities and other leaders and the town council, to inform them of the program and ask if they would accept and support the implementation of the program in their community. Communities are selected based on the outcomes of these meetings.

Once communities are selected, a brief community survey is undertaken to construct a profile of local resources and facilities. Program staff and community leaders call upon these resources as needed to support academic, recreational, and other activities.

Community Involvement: The Selection Committee

Shortly after the communities are selected, an assembly of local leaders and authorities is organized within each community to establish a selection committee and to elect its officers. One of the most important tasks of this committee is the selection of the scholarship recipients (see below). The selection committee also involves the local leaders and authorities, parents, and girls in program activities, prepares and conducts monthly meetings with parents to distribute the stipends, accompanies the promoter to various visits as appropriate, and organizes program evaluations or needs assessments.

After one year of work, committee members elect new officers and select alternates from among the community leaders, based on their demonstrated interest in the program

and the cooperation they had previously given. Over the years, parents of scholarship recipients become members of the committee, as its duties become more focused on follow-up of scholarship beneficiaries than on the selection of new recipients.

Selection of Scholarship Recipients

Once the committee is established, the committee members, school staff, and the promoter (see below) work together to compile a list of girl candidates. The promoter, with the assistance of the committee members, then conducts a socioeconomic survey in each candidate's household, discusses the scholarship program with the family, and determines parents' interest. Based on the outcomes of this process, the selection committee, the school representative, and the promoter select the scholarship recipients. After their daughters are registered in school, the parents are required to attend monthly meetings, during which selection committee members and the promoter distribute the stipends and resolve problems that arise.

The Promoter: Providing Follow-up with Scholarship Recipients

Key to the implementation of the AGES Scholarship Program are the promoters—educated women (preferably elementary school teachers but minimally women with some secondary school studies) who live in or near the communities, are fluent in their Mayan language, acknowledge and respect Mayan traditions, and are willing to work with their people. Promoters are identified through recommendations from Ministry of Education supervisors and PVOs working at the local level. The National Chief of the Scholarship Program provides one week of initial formal training and regular on-the-job training for the promoters throughout the program.

The promoters' primary responsibility is follow-up, which consists of classroom visits and meetings with teachers to determine whether the recipients are attending classes regularly and how they are performing on homework and tests. In addition, the promoter makes household visits to provide reinforcement and support to parents and weekly academic tutoring for girls with low grades. The promoter also meets with the selection committee to plan monthly parent meetings and supervise the use of money.

During the household visits and monthly meetings, promoters raise parent/community awareness of the importance of educating girls and delaying marriage, and respond to parent concerns. Locally-adapted leaflets and visual materials are distributed and used during meetings as appropriate.

Human Development and Family Life Education

At the beginning of the school year, the AGES bilingual educator, with the assistance of the promoter, assesses which topics in the family life education curriculum the school children (both boys and girls), and the parents would like to explore. Based on this

assessment, a monthly or bi-monthly activity on human sexuality is conducted, covering selected personal issues and communication between parents and children.

Administration of the Program

AGES provides overall administrative support and monitoring activities to the program. The headquarters office staff in Guatemala City provides administrative and financial support. AGES's National Chief of the Scholarship Program, who works from the AGES central office, supervises and monitors the program, making quarterly visits to the communities and holding quarterly meetings with locally-based program promoters. Informal relationships are established among the school staff, the Ministry of Education local supervisors, and AGES staff. The promoters also play a key role in administering the program in their assigned communities.

A summary of the program is provided in Figure II.3.

AGES Program Results

Between 1986 and 1990, the AGES girls' scholarship program was expanded from three communities to 13 communities. Between 1987 and 1990, the program provided approximately 1,700 scholarships to girls at the elementary and secondary levels (Nieves, Lundgren, and Bezmalinovic 1994).

Although internal evaluations and anecdotal data indicated that the program was succeeding in increasing girls' school retention, the issues of sustainability and of wider implementation and impact (i.e., on Guatemala's high fertility rates) became a major concern to USAID. The principal reason for AGES's inability to garner government and private-sector support for the program was due to AGES's focus on family planning, a subject of major controversy in Guatemala. With significant Church opposition to family planning efforts (an example is the Guatemalan government's opposition to the agreements reached at the 1994 International Conference Population and Development, held in Cairo), it became apparent that the program could not survive without international donor funding, and that ownership and commitment by Guatemalans would probably not be attained. This situation was compounded by poor support from the AGES board of directors, who were unable to agree on program objectives (Clay 1994; Lyons 1996).

When USAID funding terminated, the program was reduced in size. Data are not available for 1992 through 1994. In 1995, however, AGES provided 156 scholarships to elementary level girls only. AGES funded the scholarships from the sale of products made by the AGES printing shop and from individual donations. Salaries for the promoters and the National Chief of the Program were funded by the Embassy of the Netherlands (Monterroso 1996).

During the nine years of operation, available data on the program document three significant results: improved enrollment; decreased dropout; and improved school year completion.

Figure II.3
The AGES Scholarship Program: Building Girls' Participation Through Economic Support, Community Involvement, and Personal Contact

Local NGO Administers Program	Funders provide money to communities through AGES
Local Leaders Participate in Selecting Communities	PRONEBI school supervisors and AGES staff identify 6-10 potential communities
	Local leaders of potential communities provide input and confirm interest in hosting the program
	PRONEBI supervisors and AGES staff select communities/prepare community profile
Community Representatives Select Scholarship Recipients	Local leaders and authorities organize a selection committee
	Selection committee works with school staff and AGES staff to prepare list of candidates
	Selection committee and AGES promoter survey families to determine candidate eligibility and parent interest
	Selection committee and AGES make final decisions concerning recipients
Participating Communities Assist with Program Implementation and Monitoring	Selection committee distributes stipends based on enrollment and attendance
	Parents meet regularly to receive funds and discuss issues
Locally-selected "Promoters" Provide Person-to-Person Contact	Promoters provide tutoring, counseling, and encouragement and convene parents for meetings; also serve as role model
Human Development Training/Family Life Education Reflects Local Needs	Parents and children recommend topics for discussion

Figure II.4
Changes in Enrollment During AGES Scholarship Program Implementation, 1986-1995: Data from Participating Schools*

School	Data Collection Years	Enrollment Before AGES		Enrollment During AGES		Change in Enrollment		Percent of Enrollment Change	
		Male	Female	Male	Female	Male	Female	Male	Female
Pachaj, Quetzaltenango	1987-1994	163	141	164	146	1	5	1	3
Buena Vista, Sacatepequez	1986-1995	109	93	194	180	85	87	77	93
Ixmoco, San Marcos	1987-1995	55	36	108	97	53	61	96	169
Chipiacul, Chimaltenango	1987-1995	126	111	123	126	-3	15	-2	14
San Jose, El Yalu	1988-1995	49	47	60	64	11	17	22	36
Calel, Quetzaltenango	1988-1994	204	133	326	246	122	113	54	85
Acal, Huehuetenango	1988-1995	141	107	176	146	35	39	25	36
Tojcail, Huehuetenango	1988-1995	65	43	40	31	-25	-12	-38	-28
Chirijiak, Quetzaltenango	1992-1994	92	76	80	76	-12	0	-13	-
Tixel, Huehuetenango	1992-1995	74	49	73	54	-1	5	1	10
Cruz De Piedra, Sacatepequez	1992-1995	94	56	106	82	12	26	13	46
Xeatzan, Chimaltenango	1992-1995	94	81	102	104	8	23	9	10
Chixal, San Marcos	1993-1995	79	67	103	106	24	39	30	58

Source: Monterroso 1996.
**Figures are raw enrollment figures only. Population growth has not been factored into calculating the percent of increase in enrollment.*

During its nine years of operation, available data on the program document three significant results: improved enrollment; decreased dropout; and improved school year completion.

- *Improvements in girls' elementary school enrollment.* Elementary school enrollment data compiled during The AGES Scholarship Program implementation document increases in enrollment for males and females, *with significantly higher percentages of increase for females than for males* (see Figure II.4) (Monterosso 1996). These increases continued from 1992-95, years when funding support from organizations other than USAID was available.

- *Lower girls' dropout rates and higher rates of school year completion.* As indicated in Figure II.5, less than 5 percent of the AGES scholarship recipients dropped out at the elementary school level, and from 8 to 17 percent dropped out at the secondary school level. From 1992 to 1994, dropout rates reached 1 percent at the elementary school level and 0 percent at the secondary school level. In contrast, the dropout rates for girls in PRONEBI schools in general were around 7 percent in grade 3 and from 3-4 percent for grade 6 (Information System of the Ministry of Education). In "Lessons Learned from a Pilot Program" (Nieves, Lundgren, and Bezmalinovic 1994), where school retention for AGES participants and a reference population was measured by grade-by-grade distribution, the authors reported that "the chances that a girl who is in any one grade will continue on to the next grade are always greater for the AGES population." AGES participants showed higher percentages of girls enrolled in the upper grades than the reference population. In 1992, scholarship recipients in the first grade had a four-fold greater chance of continuing to the fifth grade than girls in the reference population. A scholarship recipient in the 4th grade was almost 12 times as likely to enter fifth grade as a fourth grade girl in the reference population (Nieves, Lundgren, and Bezmalinovic 1994). Anecdotal data also showed lower dropout rates for nonscholarship girls attending the same schools, suggesting that in addition to affecting the economic barriers to girls' education, the programs may also have had an effect on other barriers (Clay 1994).

- *High rates of grade promotion.* From 1989-91, at least 77 percent of the AGES program elementary students were promoted to the next grade (see Figure II.5). This rate varied by grade, however—for example, in comparing AGES recipient promotion rates with those of a reference population in 1991, Nieves, Lundgren, and Bezmalinovic (1994) found that the rates for the reference population were actually higher than the rates for the AGES participants for grades 1-3, but that the promotion rate for the AGES recipients was 8.5 percentage points higher than the rate for the reference population for the fifth grade. Also, from 65-81 percent of the secondary school participants were promoted to the next grade (see Figure II.5). Promotion rates at both levels improved still further from 1992 to 1994, averaging 85 percent at the elementary level and 88 percent at the secondary level. This is in contrast to the 42 percent girls' promotion rate in PRONEBI schools (Monterroso 1996).

Figure II.5
Promotion, Dropout, Failure, and Completion Rates of Girls Participating in the AGES Scholarship Program

Girls' Participation	1989	1990	1991	1992	1993	1994
Elementary School (TOTAL)	**559**	**624**	**622**	**396**	**468**	**471**
Completed School Year	529 95%	604 97%	596 96%	386 97%	464 99%	469 99%
Promoted	437 78%	495 79%	482 77%	336 85%	398 85%	407 86%
Failed	92 16%	109 17%	114 18%	50 13%	66 14%	62 13%
Dropped out	30 5%	20 3%	26 4%	10 3%	4 1%	2 1%
Secondary School (TOTAL)	**21**	**51**	**75**	**55**	**58**	**59**
Completed School Year	19 90%	47 92%	62 83%	52 95%	58 100%	59 100%
Promoted	17 81%	37 73%	49 65%	49 89%	52 90%	50 85%
Failed	2 10%	10 20%	13 17%	3 5%	6 10%	9 15%
Dropped out	2 10%	4 8%	13 17%	3 5%	0 0%	0 0%

Source: Annual Reports of AGES Scholarship Program, Guatemala

- *Improvements in primary school completion.* Although actual primary school completion data were not available, the several documented results—i.e., higher percentages of increase in enrollment for girls than boys in similar situations, lower dropout rates for girls in the AGES program than for girls in comparison groups, increasing year-end completion and promotion rates, and decreasing dropout rates during the implementation years—all suggest that the AGES program leads to higher rates of primary school completion.

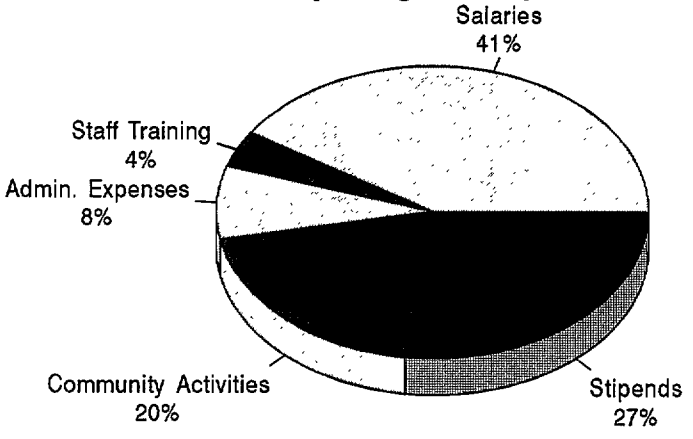
AGES Program Funding

Funding allocations for the AGES Scholarship Program were not available to the authors. In 1994, however, total expenses of the scholarship program alone were $104,000. Of that amount, about 27 percent was used to award over 500 scholarships in 13 communities. The monthly stipend, given for 12 months, was $4 for girls in elementary school, $9 for girls in the first three grades of secondary school, and $15 for girls in higher grades, plus an additional $5 at the start of each school year for enrollment costs and school supplies (AGES 1994).

Of the remaining funds, 41 percent of the budget was allocated for staff salaries, and 20 percent was devoted to community activities and educational materials (i.e., food and materials for lunch, coffee breaks, or monthly and annual meetings, leaflets for nonreaders, cloth flipcharts, and drawing materials). Eight percent covered administrative expenses, and 4 percent was used for staff training (see pie chart in Figure II.6). Considering the total cost for 1994 and the approximate number of scholarships awarded, it can be estimated that expenditures averaged about US $200 per girl in that year.

Although salaries consume a significant portion of the funding, the staff—specifically the promoters—are considered crucial and play a significant part in the program. (The promoters are the only bilingual persons within the community whose exclusive responsibility is to interact with the girls, their families, and other community members.) In 1994, there were 10 promoters (one per community for most communities, two per community for three communities), the National Chief of the Scholarship Program, and several support staff. To reduce costs, AGES is trying to transfer some of the duties of the promoter to the selection committee members.

Figure II.6
AGES Scholarship Program Expenditures



Total Expenses: $104,000 (in US dollars)
Source: AGES Annual Progress and Financial Report for 1994.

DISCUSSION

The award of scholarships to families of girls who attend primary school meets the basic criteria for an incentive as defined in this paper: it provides something of value to the girls and their families, and is given regularly and consistently when the desired behaviors—attending, continuing, and/or completing school—are demonstrated. This discussion explores the program's effectiveness in bringing about improvements in girls' education and the elements that contributed to implementation.

Is the AGES Scholarship Program Effective?

Program effectiveness can be assessed by the extent to which program implementation contributes to the goals of increasing girls' enrollment, attendance, retention, and completion, delaying marriage age, and reducing fertility. Data presented in this study show that AGES Scholarship Program implementation is associated with the following:

- increases in girls' and boys' elementary school enrollment, with higher increases for girls than boys;
- girls' dropout rates significantly lower in the upper primary grades than those of girls enrolled in similar nonparticipating populations;
- girls' school year completion rates of at least 95 percent at the elementary level;
- girls' promotion rates lower than the rates of the reference population for grades one to three but higher than the rates for the reference population for grades four to six; and
- girls' promotion rates averaging 82 percent at the elementary level and 80 percent at the secondary school level.

It appears, then, that the AGES Scholarship Program was most clearly effective in improving girls' enrollment and dropout rates, and had some impact on girls' promotion rates in the upper primary grades. The scholarship program appears to have had less impact on the promotion rates during the early primary years.

Although no data were provided to support a discussion of whether the AGES Scholarship Program contributes to changes in fertility and marriage age, the consistently high completion rates and relatively low dropout rates, even for the secondary school scholarship recipients, suggests that girls receiving scholarships are marrying later.

What Elements Contribute to Program Effectiveness?

Program Perspective

Admittedly, increases in enrollment, lower attrition, and high school-year completion rates cannot be attributed solely to the money itself, but rather to the full program approach, which includes other essential components such as the promoters, community involvement, and family planning workshops. What is commonly referred to by AGES as a scholarship program is a multi-faceted effort designed to attract girls, particularly rural, indigenous girls, to school in Guatemala; distribution of scholarships is just one element. For example, external evaluators (Nieves, Lundgren, and Bezmalinovic 1994) identified the support of the promoter as "key in assisting girls to obtain passing grades and stay in school." Mones and Villatoro (1993) acknowledged the importance of the promoters' training to work at the community level. Program planners, administrators, parents, students, and community members who were interviewed acknowledged the valuable contribution of the promoter, who supports program participants outside of the classroom, serves as a role model, and counsels the parents as they confront the challenges involved with sending their daughters to school.

Nieves, Lundgren, and Bezmalinovic (1994) also identified community participation as one of the key factors that influenced the acceptance of the scholarship program. The community participation involved local leaders in program planning, improved communication between parents and children and parents and teachers, empowered community members to actively confront and solve their own problems, and increased community organization as a result of the various interactions that community leaders, parents, teachers, and children have when conducting the scholarship program activities.

The human development/family life education workshops, which address issues related to early fertility and marriage, were identified as key program elements by Mones and Villatoro (1993) and program planners and administrators who were interviewed. Mones and Villatoro (1993) also acknowledged the importance of families'/communities' increased awareness of the importance of educating girls and of the family benefits of postponing the age of marriage.

The pie chart in Figure II.6, which indicates the expenditures for the different program components, shows that the actual stipends, or payments to the girl recipients, only account for 27 percent of the total expenses for the program. Almost half of the budget—45 percent—is allocated for staff salaries and training.

One question that therefore surfaces is, "Is the scholarship money necessary at all?" A study of the "Educate Girls!" Pilot Project, the project begun in 1993 and jointly funded by

USAID and other institutions to test the effectiveness of three "packages" of interventions (Chesterfield and Rubio 1995a), provides evidence to suggest that the answer is yes. [4]

Schools were selected to receive one of three packages of interventions: 1) small scholarships for selected girls, interaction with an outreach worker (similar to a promoter), and a parent committee; 2) tutoring and encouragement from a promoter and support from a parent committee; and 3) a set of motivational girls' education literature and materials. Enrollment, attendance, completion, dropout, failure, and promotion rates from the sample were compared with rates from a comparison group of rural PRONEBI public schools that did not receive the girls' education interventions. It should be noted, however, that PRONEBI schools did receive a set of services that included a program of teacher training, teachers guides, sets of bilingual text books, and other curriculum materials.

The data collected show that participants who received any one of the packages had higher average attendance among girls than the comparison group, i.e., rural PRONEBI public schools not receiving any of the package services. In addition, the study states that *the "scholarship package" girls had higher attendance rates than the girls who received the other Eduque packages.* The scholarship package recipients also had higher attendance rates than boys in the same schools (See Table II.1).

Table II.1
Attendance by Incentive Package Schools and Comparison Schools

Package No.	Package Type	Attendance (in percent)		
		Boys	Girls	Total
1	Scholarships, Outreach Worker,* and Parent Committee	84.1	87.9	85.7
2	Outreach Worker and Parent Committee	79.5	73.3	77.0
3	Motivational Materials	88.9	71.5	81.3
4	Comparison Schools	90.3	71.4	80.1

Source: Chesterfield, R., and Rubio, F. 1995a.
**Outreach worker is the promoter.*

Data also indicated that *the scholarship package participants had the lowest dropout rates of the various interventions* or the comparison schools, and *the scholarship package schools had a significantly higher index of girls' active classroom participation* than either the other intervention schools or the comparison group schools (see Tables II.2 and II.3).

[4] The data presented here are from the first year of program implementation when implementation problems had not been corrected.

Table II.2
Dropout Rates by Intervention Package Schools and Comparison Schools

Package No.	Package Type	Dropout Rate (in percent)	
		Boys	Girls
1	Scholarships, Outreach Worker, and Parent Committee	4.8	5.3
2	Outreach Worker and Parent Committee	4.1	7.8
3	Motivational Materials	5.9	7.6
4	Comparison Schools	9.3	9.7

Source: Chesterfield, R., and Rubio, F. 1995a.

Table II.3
Indices of Active Classroom Participation by Package Schools and Comparison Schools

Package No.	Package Type	Indices of Active Participation*	
		Boys	Girls
1	Scholarships, Outreach Worker, and Parent Committee	1.14	0.83
2	Outreach Worker and Parent Committee	1.23	0.64
3	Motivational Materials	1.22	0.55
4	Comparison Schools	1.26	0.68

Source: Chesterfield, R., and Rubio, F. 1995a
**Index of Active Participation is defined as the ratio of the percent of interactions initiated by target children and the relative frequency of attendance of these children.*

It is important to note, however, that girls' school-year completion rates for Educate Girls! schools were only 3 percentage points higher than the school-year completion rates at the comparison schools (see Table II.4). Promotion rates for the comparison group schools were slightly higher than those of the scholarship package schools (73.3 percent and 72.6 percent respectively).

Table II.4
Overall Completion Rates

Package No.	Package Type	Overall Completion Rates	
		Boys	Girls
1	Scholarships, outreach worker and parent committee	89.9	92.6
2	Outreach worker and parent committee	89.1	92.5
3	Motivational Materials	92.4	94.4
4	Comparison Schools	89.2	89.4

Source: Chesterfield, R., and Rubio, F. 1995a

In short, without the scholarship, the difference in the attendance rates for those girls in comparison schools and those who received the interventions was slight and less than the attendance rate for boys in the same school. With the scholarship and the other interventions, however, attendance rates were at least 15 percent higher and dropout rates were lower than the rate for girls in the comparison group or involved with interventions other than the scholarship. Given these data, it appears that scholarships do serve a unique and added motivational role in improving girls' participation, even in an environment where primary education is free to all. Scholarships also appear to generate greater changes in girls' classroom participation than the other tested interventions (Chesterfield and Rubio 1995a).

At least two other conditions for success were identified by evaluators and interviewees:

- a structured system of management of the scholarship program; and
- the government becoming more democratic, reducing the security risk of working in rural areas and providing more opportunities for collaboration with the Ministry of Education.

Managerial/Administrative Perspective

Two conditions seem to play a major role in the ability of the program to increase girls' school enrollment, persistence, and completion: 1) the AGES organizational commitment to participatory design, development, and implementation; and 2) the characteristics of the promoters.

The designers of the AGES girls' scholarship program, who were also the directors of the program during the years that the program was funded by USAID, had worked extensively in indigenous communities and had considerable experience in participatory planning methods. Approximately one third of the key staff in the AGES office were indigenous men and women, and the women hired as promoters in the communities were all indigenous women. The participatory processes, the high percentage of indigenous personnel, and the knowledge of conditions and beliefs among indigenous communities convinced village leaders of the sincerity of the AGES program in working in a collaborative fashion with them.

AGES engaged in a labor-intensive selection process to identify appropriate Mayan women to serve as promoters. For the most part, these women had confronted many obstacles in their own lives to obtain an education. In addition, they were committed to returning to the rural areas to provide a service to other indigenous communities as a way of "giving back" some of the support that they had been fortunate to receive. In addition, AGES developed a highly effective training program to hone the skills of the promoters. A week-long intensive orientation introduced the promoters to the program and its content, and the quarterly visits to the site provided important feedback and monitoring. For the most part, however, the promoters worked relatively independently of the main office, and contact with the National Chief was limited. The people selected for the promoter positions were particularly important. High quality pre-service and in-service training and supervision also were essential.

Is the AGES Scholarship Program Sustainable?

The AGES Scholarship Program offers some potential for program sustainability by including a process for developing the human capacity to implement the program. By recruiting and training local community members to serve as promoters and selection committee members, the program could build local capacity as well as parent acceptance and interest. Unfortunately, however, attempts to achieve this have met with limited success. In addition, preparing volunteer committee members to provide support and raise community awareness about the importance of girls' education does not significantly reduce operating costs.

The program also does not offer a means for sustaining itself over time financially without international donor assistance. Although the total cost of $104,000 for 522 scholarships—an average of about $200 per child per year—is equivalent to far less than

one percent of Guatemala MOE's $1.135 billion budget in 1993 (CAII 1992a), the amount still could be prohibitive in terms of the total money available for education and the amounts that can be reserved to provide education to this underserved population.

Partial funding may not be a viable option. Although the scholarship component is only 27 percent of the program's total budget, there are no data to show that the scholarships alone would be effective without the other components. The Chesterfield and Rubio study (1995a) shows that the other support components alone do not bring about significant enough differences to justify the expenditure. As is evident by the decrease in scholarship distribution in 1996 (post-USAID funding), operating the program at the same levels without guaranteed funding for the entire program may be difficult. Although AGES began to use its own resources (i.e., the print shop) to generate operating funds, the money raised could not support a full-scale program. Sustained program implementation seems more likely if there is a multi-year commitment from an outside funder or a reallocation of funds by the MOE to cover the entire cost of the program.

What Are the Possibilities for Widespread Proliferation?

Like sustainability, creating the program in other communities would require sufficient financial resources to provide the program services as well as the school places, and any furnishings, books, and learning materials needed for the new enrollees.

Because of the importance of the promoters to program success, the community also would need to have the human resources required for program implementation. The AGES Scholarship Program design specifies that the promoters should be local women. In Guatemala, although nearly 75 percent of the school-age population lives in the rural areas, only 11.8 percent of the country's six grade graduates are rural girls (Nuñez et al 1991). Nevertheless, the population is dense, and a village that does not have a secondary school female graduate may be able to recruit a promoter from a neighboring village. Human resources therefore should not be a major factor in AGES program expansion. The problem with the program's proliferation appears to be a financial issue which is partially a result of the nature of AGES itself. USAID attached the name "Guatemalan Association for Family Life Education" as a way of down-playing the "sex education" aspects, with only limited success. As long as AGES maintains its name and reputation as working in the family planning area, it may not be able to generate funds from among Guatemala's private-sector organizations.

What Conditions Help Ensure the Intended Results?

Scholarship programs that provide financial and academic support and a cultural bridge may be beneficial in contexts where incomes are low, parents have little money available to send their daughters to school, and language and culture discourage parents from

enrolling their children, particularly their girls, in school. The case study suggests that the program is more likely to be successful when the following conditions are present:

- a specific target population such that the effort can be focused;
- commitment from a donor to provide multi-year funding for the entire program (preferably one generation of girls through primary and secondary school);
- ability of the schools to communicate with parents, community members, and students in the language of choice;
- commitment from a local NGO that is respected by the community to provide structured, organized management and day-to-day supervision;
- commitment from the managing organization to hire and train local people to promote the program and provide academic and emotional support; and
- a sufficient pool of bilingual candidates in the local communities to serve effectively as promoters and selection committee members.

III. SCHOLARSHIPS AT THE SECONDARY LEVEL: PROMOTING ENROLLMENT AND COMPLETION

NEPAL

SCHOLARSHIPS AT THE SECONDARY LEVEL: AN OVERVIEW

In addition to their use to improve girls' school participation at the primary level, scholarships also have been used to encourage girls' enrollment and completion at the secondary level. Scholarship distribution at this level may be even more beneficial because additional years of education are likely to make an even greater impact on other social indicators (McIntyre 1996).

The premise that more education for girls is better is supported by research. Elizabeth King (1990) documents that countries that "invest heavily" in female education at the primary level see higher economic productivity, lower infant and maternal mortality, and lower fertility rates than countries that have lower participation levels. UNICEF (1992) reports that the higher the level of female schooling, the lower the population growth and the higher the chances of children getting immunized. It seems logical, then, to expect that additional years of education beyond primary school would have an even greater impact on a country's economic and social environment. In addition, higher numbers of educated women in a population increase the potential pools of female teachers and role models, both of which improve girls' participation in school (Rihani 1993). More education for girls also gives families bargaining power when they negotiate dowries (McIntyre 1996).

Increasing girls' participation in secondary school, however, presents new challenges above those faced at the primary school level. Income and economics may be even greater influencing factors, as registration fees and other related costs are generally higher for secondary school than for elementary school. This is compounded by the relative absence of enrollment requirements (of 39 Asian countries with compulsory education, only 15 required school participation beyond grade 6 (UNICEF 1991), cultures that restrict interaction between girls and boys beyond the early teens, early marriage for girls (compared to industrialized world standards), and limited opportunities for educated women outside of the home.

To help overcome these types of barriers, scholarship programs have been piloted. For example, in Bangladesh, a country with compulsory primary but not secondary education, extreme poverty, traditional female roles, and early marriage, USAID funded a scholarship program to encourage girls to enter and continue secondary school and thereby lower fertility by delaying marriage and increasing contraceptive use. Under that program, girls' enrollment in secondary school increased from 27.3 percent to 43.5 percent, and dropout rates decreased from 15 percent to 3.5 percent (Thein, Kabir, and Islam 1988).

In light of this success, the program was replicated in Nepal, another Asian country where conditions suggested that a similar approach might be effective. The following case study describes how this program was adapted in Nepal and the results that were achieved.

CASE STUDY: THE FEMALE EDUCATION SCHOLARSHIP PROGRAM

Summary Information

Country:	Nepal
Sponsoring Agency:	United States Agency for International Development (USAID)/Nepal through the Asia Foundation.
Incentive(s) Used:	Scholarships for girls enrolling in and attending secondary school.
Dates:	1991-1995
Target Groups Served:	All female students of government secondary schools (grades 6 to 10) in the Banke District of Nepal.

COUNTRY CONTEXT

Nepal, an Asian country along the southern range of the Himalaya Mountains, is a largely unindustrialized country, with about 90 percent of the population living in rural areas. The harsh climate and poor soil of the mountain slopes make farming difficult; most of its population are subsistence farmers. The per capita income is $170 per year. The national birth rate is high, with an average of 5.6 children per woman (Maynard-Tucker 1994). The economic situation, together with the expanding population, which has doubled since 1960, challenge the country's ability to provide a higher quality of life despite improvements that have been made.

Education

Although a western type of public education has been implemented in Nepal for over 30 years, efforts to provide formal education to the masses of people only began in the 1950s and '60s as national commissions reviewed the educational system and recommended various measures for reform. In 1971, a National Education System Plan (NESP) was developed to "systematize" education development in Nepal (APEID 1984) and provide educational facilities to all areas of the country. National initiatives included government-established schools, teachers' salaries paid fully by the government, the recruitment of female teachers, and free textbooks for primary school students.

Figure III.1
Nepal: Major Social and Educational Indicators[1]

Indicator	Country			
	Guatemala	Nepal	Haiti	Pakistan
Per Capita Income (in US$)	$920	$170	$400	$370
% Rural	58%	90.4%	69.7%	68%
Compulsory Education	6 yrs	5 yrs	6 yrs	none
Free Education	1st grade - high school[2]	1st grade - 9th grade[3]	Tuition required for all grades	1st grade - 10th grade
Female Literacy Rates	47.1%	13.2%	47.4%	21.1%
Female Primary School Gross Enrollment Rate*	71%	57%	80%	28%
Female Secondary School Gross Enrollment Rate*	20%	17%	20%	12%

*The gross enrollment ratio is the total enrollment in the given level, regardless of age, divided by the population of the age group that officially corresponds to that level of schooling.

[1] Unless otherwise indicated, statistics are taken from UNESCO, *World Education Report 1991.*

[2] Registration fee is required.

[3] Rahman 1996

Formal schools were organized in a three-tier system: primary school – grades 1-5; lower secondary school—grades 6-7; and secondary school—grades 8-10. Primary education was made free first to grade 3 and later to grade 5. From 1970-82, the number of primary schools increased 49 percent, and total primary school enrollment more than doubled (APEID 1984). In the late 1980s, over 80 percent of the country's children were going to school (Basnet 1990). Of the 2.7 million children enrolled in 1988/89, 77 percent were enrolled in primary school, while 11 percent were enrolled in lower secondary school, and another 11 percent were enrolled in secondary school (Basnet 1990).

In 1992, the elected government passed a national policy granting free state tuition for all school students up to grade 6, and later up to grade 9 (Maynard-Tucker 1994; Rahman 1996). Although exempted from the monthly tuition fees, however, parents still must pay fees for admission, examinations, parents' and anniversary days, school construction, games, furniture, poor students' fund, and science labs (Maynard-Tucker 1994).

Status of Female Education

In Nepal, access to education and training is a right for every child. Government statistics on the status of female education, however, indicate that while the overall literacy rate is 39 percent, female adult literacy lags behind at about 14 percent. Although girls' primary school enrollment steadily increased from 1983 to 1987, girls' enrollment was less than 31 percent of the total primary school enrollment at that time (Basnet 1990). In 1988/89, girls represented only 32 percent of primary school enrollment, 30 percent of lower secondary school enrollment, and 28 percent of secondary school enrollment (Basnet 1990).

Although Nepal's development plans continue to include special initiatives to promote girls' and women's education, the percentage of girls participating in schools remains low, with about 41 percent enrolled at the primary level and around 17 percent enrolled at the secondary level (Human Development Report 1994, UNDP). This relative lack of education for girls and women has resulted in an overall dearth of civic consciousness, legal awareness, and occupational preparedness among the female population (Basnet 1990).

Barriers/Constraints to Girls' Education

Barriers to girls' education in Nepal can be organized into five categories: economic barriers; labor issues; cultural attitudes; physical barriers; and national commitments (see Figure III.2). Many of these barriers are related to the society's cultural values, which for centuries have governed women's activities through widely practiced customs such as early marriage and the traditional role of the girl as an assistant to the mother at home while she is young and as wife and homemaker when she is an adult (Maynard Tucker 1994). Nevertheless, a recent USAID evaluation study suggested that, if provided with financial support, parents in rural Nepal would be willing and able to redistribute the workload so that girls are freed to attend school (Tucker 1994).

Figure III.2
Barriers to Girls' Education in Nepal

Economic Barriers	Labor Barriers	Socio-Cultural Barriers	Physical Barriers	National Commitment Barriers
People do not have the money to send all of their children to school, and boys are given preference since they are viewed as the major income earners of the family.	Girls are expected to work at home, looking after younger children, fetching water, and preparing food. The work force offers limited opportunities for girls who complete school.	Society dictates women's roles as good wives and housekeepers. Hence, most parents do not feel that they need to send their daughters to school for education. The average age of marriage for girls in Nepal is 14 years, two years after the girl finishes primary education.	Remote rural areas have very limited access to schools. Overcrowded schools offer limited spaces for new girls. Schools in poor condition (unclean, poor facilities) with inadequate toilet facilities discourage girls' attendance.	Low government initiative to provide facilities for all those eligible for education. Less than full support for girls' education initiatives (e.g., limited monetary incentives to encourage girls' education, slow response to girls' education campaign)

Source: Maynard-Tucker 1994; APEID 1984.

Illustrative Efforts to Improve Girls' Education

Recognizing the need to improve female literacy, various governmental and nongovernmental agencies have made some special efforts to help bring about change. For example, His Majesty's Government of Nepal, with special assistance from UNESCO, UNDP, and UNICEF, implemented the Equal Access of Women to Education Project, with the main purpose of training and placing female primary school teachers in rural schools as a way to motivate rural parents to send their daughters to school. Other projects include a school award program, where the Ministry of Education and Culture awarded cash prizes in 18 districts to schools that enrolled the maximum number of girls (Basnet 1990), a priority female teacher program, the establishment of child care centers in some rural areas, and nonformal education mostly at the primary school level, offered by the Government of Nepal and outside organizations that offered flexible schedules, shortened instructional days, and/or modified curricula (for example, the Cheli Beti program provides an equivalent to grade 3 literacy and numeracy skills for girls unable to attend school full time).

Summary

Nepal is an extremely low-income country with a predominantly rural population and a culture that discourages girls' participation in school, particularly at the secondary level. Significant gaps in girls' and boys' enrollment and low rates of participation exist despite gradual increases in girls' enrollment and some government and other donor initiatives to improve girls' education. It is in this context that a girls' scholarship program was initiated.

PROGRAM DESCRIPTION

Key Features

The Female Education Scholarship Program (FESP) is designed to motivate parents to send their girls to secondary school, with the ultimate objectives of delaying the early age of marriage and childbearing, lowering the average number of children born per woman, and encouraging girls to be more economically independent. FESP provides scholarships of Rupees 80 ($1.59) per month to all girls residing in the project area (Banke District) who graduate from grade 5 and continue their education in government schools through grade 10 of the secondary schools. The scholarship is paid into students' bank accounts and covers the full cost of uniforms, stationery (e.g., paper, pencils), and other non-tuition fees charged by secondary schools. Up to grade 9, the tuition is waived by the government. Grade 10 students' scholarships cover tuition. Girls and their parents bear any additional expenses above and beyond the scholarship amount, and provide food, board, and transportation costs to and from school.

Each scholarship recipient opens and operates her own bank account. Six months of scholarship money (enough to meet the bank's minimum deposit requirement) is deposited

at the beginning of a calendar year into each girl's account. From the seventh month the scholarship money is deposited monthly. Girls withdraw money as needed. Project staff train girls on how to prepare checks, maintain their accounts, and use their passbooks to record deposits and withdrawals.

How Program Is Administered

The Asia Foundation, a private, publicly supported, grant-making organization that works in more than 20 countries in Asia and the Pacific, administers the program with funds provided by USAID. The program is implemented by a local NGO, the Women's Development Center (WDC). The Asia Foundation's Nepal office provides both technical assistance and funds to WDC on a quarterly basis. WDC then disburses the funds to the girls' bank accounts and monitors program activities by the recipients, the banks, and the secondary schools.

Staffing

At WDC, FESP is staffed by a full-time staff consisting of a project director, accountant, secretary, messenger, and five field supervisors. The field supervisors visit the schools and the scholarship recipients, monitor participant attendance and performance, provide information, and report findings. WDC's Executive Board assists in monitoring the program activities. Board members make random visits—sometimes in pairs and sometimes with the WDC field supervisors—to find out whether or not girls are receiving scholarships and attending regularly, and if WDC project staff are visiting schools regularly. At schools, board members also talk with teachers, students, and parents. In addition, because board members live in the communities served by the project, they receive feedback on the project through local meetings and various informal settings. The board president meets with project staff, reviews financial transactions, and signs checks for payment.

Implementation Process

An initial baseline survey provides background information for program planning and implementation. The following information is collected from all primary and secondary schools for three years prior to the start of the project:

- the number of boys and girls studying in grades 1 through 10;
- the number of male and female teachers assigned to each school;
- the number of secondary schools having separate toilet facilities for girls; and
- the number of secondary schools having sufficient seating and space to accommodate additional students.

The survey is updated each year, and results are used to measure changes in enrollment patterns. After the survey is conducted, WDC staff distribute scholarship application forms to girls in grade 5. Girls who have previously graduated from grade 5 but discontinued their education can obtain applications from the project office. All girls who receive scholarships in grade 6 are entitled to receive scholarships until they graduate from grade 10. Each year a new group of girls receive scholarships when they enter grade 6.

One condition for continued receipt of scholarships is that girls must attend school for a minimum of 75 percent of each quarter year. If girls fail to attend school regularly or fail to graduate to the next highest grade each year, the scholarship is reduced to Rupees 60 ($1.19) per month. If attendance increases to above 75 percent or if girls graduate to the next highest grade, the full scholarship is restored. If girls fail to advance after two years in any one grade or repeatedly do not attend school, the scholarship is suspended, but may be restored.

Once money is distributed, WDC staff monitor the program through field supervisors who are assigned to approximately twelve schools each. Each supervisor does the following:

- collects baseline data of the numbers of boys and girls in each class;
- prepares registers and records the names, addresses, and ages of scholarship recipients, the scholarship payments, and the girls' school attendance;
- talks to girls who are frequently absent and their parents to identify reasons;
- talks to headmasters/headmistresses and teaching staff concerning problems or successes experienced by students;
- checks school premises to see that they are clean and able to support the number of students enrolled in the school;
- encourages headmasters/headmistress to provide separate toilets for girls and to employ female teachers;
- lectures FESP girls about the benefits of education and the advantages of economic independence, late marriage, and smaller families;
- accompanies scholarship recipients to the bank and teaches them basic banking procedures; and
- presents herself as a role model.

WDC project staff encourage the formation of Parent-Teacher Associations (PTAs) so that they can play an active role in promoting girls' education, school facilities improvement, and community support for the program. Parents of scholarship holders are encouraged to form PTAs, and since 1991 ten PTAs have become functional.

Reporting and Program Monitoring

At the end of each year, the Asia Foundation completes a report showing secondary school enrollment, attendance and examination results, dropouts with reasons for individual dropout, and the status of school facilities. When the first group of students completes grade 10, reports will show the number of students selected to sit for the school learning certificate (SLC) and the pass/fail rate. Girls leaving grade 10 and remaining resident in the project area will provide information to WDC regarding employment, income, and marital and fertility status.

In addition to WDC Executive Board monitoring (see Staffing section), an Asia Foundation Program Officer monitors all of the activities, making quarterly field visits to WDC, schools, parents, and scholarship holders. The Foundation's other senior staff make bi-annual monitoring visits to the project site, analyze data obtained from the project, and provide technical assistance to other staff.

Figure III.3
Female Education Scholarship Program

US Agency for International Development	• Funds program • Provides oversight.
The Asia Foundation	• Administers program. • Provides funding and technical assistance. • Makes quarterly visits to Women's Development Center (WDC), schools, parents, and scholarship recipients. • Makes semi-annual monitoring visits to analyze data and provide TA to WDC staff. • Prepares annual reports of progress and outcomes.
Women's Development Center Staff	• Conduct baseline survey. • Distribute scholarship applications. • Disburse funds to recipient bank accounts.
Women's Development Center Supervisors	• Prepare registers and review enrollment and attendance records. • Counsel parents and students who are frequently absent. • Talk to headmasters/headmistresses and teaching staff about girls' successes and problems. • Check school premises for cleanliness, numbers of school places, and toilet facilities. • Encourage establishment of PTAs. • Lecture girls about the benefits of education. • Accompany girls to bank/teach banking procedures. • Serve as role models.

FESP Program Results

The scholarship program started in 1991, providing scholarships to 765 girls in grade 6. Scholarship distribution expanded, with the program providing additional scholarships for grade 6 as well as funding for the following grade each succeeding year (see Figure III.4). In 1995, 3,478 scholarships were distributed (Rahman 1995).

Figure III.4
FESP Scholarship Holders, 1991-1994

**Years	Class 6	Class 7	Class 8	Class 9	Total
1991	765	-	-	-	765
1992	820	793	-	-	1613
1993	880	804	735	-	2419
1994	1004	887	808	615	3314

Source: Maynard-Tucker 1994.

Data show that FESP program implementation contributed to several important improvements: increases in girls' secondary school enrollment; improvements in girls' secondary school dropout and attendance rates; changes in girls' self-confidence and feelings of self worth; increased parent involvement; and improved school financial stability.

Increases in Girls' Secondary School Enrollment

Scholarship distribution correlated with increased girls' enrollment in the secondary schools. In January 1991, just before FESP was started, 1,910 girls were enrolled in secondary schools in the Banke District. In June 1995, 3,728 girls were enrolled in secondary schools (The Asia Foundation 1995). A comparison of baseline data and secondary school enrollment data collected during program implementation provides further documentation (See Figure III.5). While the district generally experienced annual increases in the percentage of girls enrolled in the 6th and 7th grades during the two years prior to FESP (averaging eight percent for grade 6 and 11 percent for grade 7), FESP witnessed a 65 percent increase in girls' enrollment over the previous year during the first year of scholarship distribution for grade 6 and a 61 percent increase in girls' enrollment over the previous year during the first year of scholarship distribution in grade 7. With one exception, girls' enrollment in grades 6 and 7 continued to increase throughout the program, although the increases were more modest than the increases of the first implementation year. After the first year, girls' enrollment in Grade 6 increased at an average of about nine percent during implementation; the first year, the increase in girls' enrollment in grade 7 averaged about 5.5 percent. In 1991, the first year of the scholarship program, when girls' enrollment in grade 6 increased by 65.4 percent, boys' enrollment increased by 22.2 percent (See baseline enrollment data in Figure III.6). In 1990, the ratio

increased by 22.2 percent (See baseline enrollment data in Figure III.6). In 1990, the ratio of boys to girls was 3 to 1 in grade 6. By 1994, the ratio of boys to girls was 1.9 to 1, a significant increase for girls.

Figure III.5
FESP Scholarship Recipients and Changes in Girls' Secondary School Enrollment, Grades 7 and 8, 1988-1994

Year	Baseline Enrollment	No. of Scholarship Recipients	Changes in Girls' Enrollment from Previous Year
Grade 6			
1988	428	--	--
1989	471	--	10%
1990	500	--	6%
*1991	827	765	65%
**1992	887	820	7%
1993	1039	880	17%
1994	1072	1004	3%
Grade 7			
1988	371	--	--
1989	400	--	8%
1990	521	--	30%
1991	503	--	-3%
**1992	810	793	61%
1993	792	804	-2%
1994	897	887	13%

* Year scholarship was distributed to class 6 girls
** Year scholarship was distributed to class 6 and 7 girls

Source: Rahman 1996; Maynard-Tucker 1994, Appendix A

Improvements in Girls' Secondary Level Dropout and Attendance

During recent interviews, headmasters noted that the attendance of scholarship girls was nearly 90 percent, and girls' dropout rate was less than 10 percent. Before the scholarship program, 30-45 percent dropout was common in most grades.

Possible Improvements in Primary School Enrollment

The data in Figure III.6 suggest that the scholarship program may have had some impact on primary school enrollment. In 1991, the first year of implementation, girls' enrollment in grade 5 increased about 54 percent. This contrasts with a 25 percent decrease from 1988-1989 and a 19 percent increase from 1989-1992. Because girls' enrollment in grade 5 actually decreased from 1991-1992, however, it is unclear whether the program or another factor is contributing to those changes.

Increased Sense of Independence and Self Worth

Parents and girls who were involved in the focus groups commented that they were beginning to accept the importance of girls' education and the benefits of girls' delayed marriage and economic independence. It seems that FESP addresses the sociocultural barriers not only by raising awareness but also by providing the participating girls *an opportunity* to perform beyond their traditional roles by giving them decision-making power over their own money and training them to do basic banking transactions. By doing this, the program has promoted—

> *"a sense of economic independence among the girls because they manage their own scholarship. Girls reveal a desire to control their life, to choose their husbands and to postpone marriage until they graduate and find a job. Furthermore, schooling has raised their status as they are becoming equal to their brothers in the eyes of their parents. Overall data show that the FESP students feel more confident about themselves, about their futures, and about their rights."* (Maynard-Tucker 1994, p. vii).

Figure III.6
Baseline Enrollment Data, Banke District

YEAR	Grade									
	1		2		3		4		5	
	B	G	B	G	B	G	B	G	B	G
1988	7464	4229	5220	1277	5812	990	2122	778	1881	962
1989	8731	3837	4695	1590	2777	1496	2457	873	1920	719
1990	8619	4172	4546	2089	3478	1382	2765	1017	2209	855
1991	8522	4419	4776	2221	3823	1637	2997	1514	2253	1316
1992	9277	4849	4424	2363	3866	1815	3315	1540	2473	1158

YEAR	Grade									
	6		7		8		9		10	
	B	G	B	G	B	G	B	G	B	G
1988	1280	428	820	371	853	269	840	254	689	170
1989	1482	471	1220	400	1076	297	865	264	811	272
1990	1525	500	1407	521	1109	352	1006	280	813	257
1991	1864	827	1321	503	1261	405	1064	240	827	256
1992	1880	887	1450	810	1292	465	1173	430	964	360

Source: Rahman 1995.

Increased Parent Involvement

FESP also has been instrumental in promoting the involvement of parents both in the education of their own daughters and in the overall operation of their local schools, through the establishment of ten PTAs. Parents in Nepal have traditionally had little, if any, involvement in school administration. The newly established PTAs provide a workable model of how parents, teachers, and school administrators can work together to address school problems such as poor attendance or inadequate facilities. PTAs have participated in the building of separate toilets for girls and in one case, extra classrooms for students.

Improved School Financial Stability

By helping the girls pay their school fees, the scholarship program has in turn assured the schools of timely collection of various fees.

Other Results

Additional impacts, such as lower birth rates and/or improved employment opportunities, cannot be ascertained until girls have graduated from high school, entered the job market, and pursued various life options. Nevertheless, planners are hopeful that, because the age when girls begin secondary school (the average Grade 6 student is 12 years old) is so close to the traditionally accepted marriage age, FESP may be an intervention that delays marriage and thereby reduces fertility.

Parents and girls interviewed for this study felt that the additional education will provide girls with better employment opportunities, but this evidence is anecdotal. Employment opportunities will depend on a variety of noneducational factors, including but not limited to labor market opportunities and the economic situation of the region.

Implementation also did appear to have some drawbacks, however. Maynard-Tucker (1994) reported that increased attendance of poor and middle class girls that resulted from FESP put additional strain on the school facilities and the teachers, reducing the amount of attention that could be given to each student. In addition, the poor students that enrolled were further behind the classes' level and thus required more teacher attention, thereby drawing teacher time from the bright students.

Cost Information

A breakdown of resources for the multi-year project is provided in Figure III.7. The scholarship budgets are based on actual enrollment of girls in the Banke District during 1991-1993 and expected enrollment during 1994-1998, with 80 rupees (US$1.59) per month allotted to each scholarship recipient. In addition, WDC administrative costs were estimated to be about $12,000 per year, or $60,000 for a five-year period.

Yearly costs varied based on the numbers of scholarships distributed. Preliminary yearly estimates of expenses may be calculated using figures from 1993. Assuming a $1.59 scholarship provided per month for 12 months for 2,419 recipients (as indicated in Figure III.4) and a $12,000 administrative fee, the total budget for that year was $58,155.

Figure III.7
FESP Resources, 1991-1995

Amount of USAID Grant	**$451,326**
Other Program Resources	
Board Members' Volunteer Time	$ 1,944
School Headmasters'/Headmistresses' Volunteer Time	$ 1,123
Office Rent	$ 642
Parents' Counterpart	$368,616
Total Other Resources	**$372,325**
TOTAL VALUE OF ACTIVITY	**$823,651**

Source: The Asia Foundation, April-June 1995

DISCUSSION

Is FESP Effective as an Incentive to Girls' Participation?

The data in this case study indicate that FESP is associated with the following:

- continued, although uneven increases in girls' enrollment in secondary school during implementation years;
- a 20-35 percent decrease in girls' secondary school dropout rates;
- improved financial stability for participating schools; and
- increased banking skills and heightened self-confidence for secondary school girls.

The tremendous increase in girls' secondary school enrollment during the first year when 756 scholarships were awarded indicates that FESP is effective at least in motivating more girls to enroll in secondary school. During the second implementation year, there was a small increase in the number of scholarships for 6th grade students (from 765 to 820, or 55 scholarships) and a similar increase in the baseline enrollment (about 60 students). In 1993-94, however, although over 100 scholarship recipients were added, the baseline enrollment increased by only 33 girls. Without more data from the locality, it is hard to speculate why this occurred. The varied increases and decreases over the four years of

program implementation, however, do at least warrant further research to investigate whether the program lost its appeal over time.

Although girls' attendance appears to be particularly important in this program, with scholarships reduced or withheld if attendance falls below certain levels, minimal attendance or retention data were provided. Headmasters/headmistresses who were interviewed for this case study indicated that dropout rates of scholarship recipients were around 10 percent in contrast to the 30 to 40 percent dropout rates for girls who did not receive the scholarship. These comments were anecdotal, however, and the group of interviewers was not a representative sample.

It is interesting to note that continued receipt of this scholarship is contingent not only upon regular attendance, but also on promotion. No promotion rate data were provided, however, and thus no comparisons can be made.

The program has not been implemented long enough to evaluate whether FESP contributes to changes in fertility rates and/or marriage age. With the increases in enrollment, one could speculate that changes in fertility and marriage age are likely. It would seem that because the money is directed toward older girls, at the 6th grade, perhaps FESP might have an even more direct effect on marriage age than a primary school scholarship.

In summary, FESP contributed to improved enrollment and reduced attrition at the secondary level, but it is too early to measure the program's effects on secondary school completion, achievement, fertility rates, or age of marriage.

What Elements Contribute to Program Effectiveness?

Programmatic Considerations

FESP's success can be attributed to several aspects of the program, many of which address identified barriers to girls' education in Nepal.

Economic Contribution. Project staff, administrators from the implementing agency (i.e., the Asia Foundation), parents, teachers, and students identified funding as the single most important factor for the success of the program. It should be noted that this money covered costs *beyond* tuition. Evaluation findings indicated that the government's tuition-free program in some grades of secondary schools did not contribute as much to increases in girls' enrollment as did the scholarship program (Maynard-Tucker 1994). Although tuition was already free, parents needed to cover the additional nontuition school fees and incidental expenses like school uniforms and books. Anecdotal responses reported in the Maynard-Tucker evaluation also indicate, however, that even parents who did not need the money to send their daughters to school at that time were motivated to enroll and were saving the money to cover expenses later in their daughter's education. Guaranteed funding by USAID indicated to parents that the scholarship would continue at least for several years.

Regular Monitoring. Regular monitoring seems to be a second important element. Through the field supervisors' monthly visits, the quarterly visits by the Asia Foundation, and the annual reports, student adherence and staff performance were regularly reviewed and documented. Parents were reminded of the importance of sending their daughters to school. Field supervisors' monitoring of the cleanliness of the schools and the availability of toilet facilities helped to remove some of the barriers to girls' attendance by making schools more comfortable for girls. Parents also stated that the attendance requirement for the participating girls contributed to the success of the program.

Increased Awareness. Teachers indicated that the parents' increased awareness of the importance of girls' education contributed to the program's success. Girls came out of their homes to attend schools and were not bound by the age-old concept of the girls' place being within the boundaries of the household. Apparently, the interaction and communication began to overcome parents' reluctance to send daughters to school because of traditional customs. Most of the parents surveyed responded that their daughters would not be "married off" until they finished secondary school.

FESP could do much more, however. As indicated in the Maynard-Tucker evaluation:

> *"The program should be reinforced in rural areas, "with more supervisors, with the creation of parents' PTA committees, and with parents' awareness meetings at the community level concerning the benefits of education for girls....The change of attitudes toward education and its benefits is difficult for rural populations to embrace because it requires a switch of values, a new outlook on life, and a break from their traditions and customs. It also requires a better economic level so that girls could be alleviated from their routine chores and devote more time to their studies."* (Maynard-Tucker 1994, p. 18).

Self-development for Scholarship Recipients. In addition to increased awareness, FESP goes one step further in addressing the sociocultural barriers to girls' participation at the secondary level by providing the participating girls with skills and *an opportunity* to perform beyond their traditional roles and by giving them decision-making power over their own money. Although giving money to the girls themselves through bank accounts presented an administrative challenge (banks did not like transacting the small sums of money and processing regular withdrawals—Maynard-Tucker 1994), the experience was nonetheless beneficial to the girls. Innovative strategies might be discussed with the participating bank in order to maintain this aspect of the program.

Girls interviewed for this case study said that they felt empowered to be able to attend schools with boys and were very motivated to continue their education. Another factor that motivated them to continue was having control over money by opening a bank account and managing it. This is important as women in Nepal are dependent on their husbands and rarely have control over family finances.

The interviewees recommended a number of steps to improve the effectiveness of FESP still further:

- improve PTAs' role through training on effective advocacy;
- provide support to schools to improve education and physical facilities;
- provide scholarships to boys of very poor families so that they are not deprived of an education and can attend schools along with their sisters. Many poor parents mentioned that they are lucky to have their daughters get scholarships to attend schools but at the same time feel very discouraged that their sons cannot attend schools;
- add a component to the program to educate parents as well as other family members about the benefits of education for children; and
- provide opportunity for girls to get practical training on micro enterprise and additional skills.

It is interesting to note that recommendations involve addressing socio-cultural as well as economic barriers.

Administrative/Managerial Considerations

As with the AGES Scholarship Program in Guatemala, a local NGO implements FESP. USAID funds the Asia Foundation, an organization with extensive experience in implementing programs such as FESP, who provides the necessary technical assistance to the NGO and establishes management systems to ensure proper implementation of the program. Close monitoring ensures sound financial and project management by the NGO and provides the safety net against any misuse of funds or poor implementation practices.

In FESP, utilizing WDC was effective for several reasons:

- WDC offered knowledge of and developed a good rapport with the communities through its field staff, who were recruited from the local areas;
- WDC's staff were able to maintain the Asia Foundation's system[4] of close follow-up of the scholarship girls;

[4]The Asia Foundation's system involves the following features:

- Each field supervisor supervises 10-12 schools, by visiting the schools each month, verifying student records for attendance, ensuring that girls of grades 6 to 10 receive scholarship money, and bank accounts are opened in the local bank for each girl.
- Field supervisors are supervised by a Project Manager.
- Each field supervisor checks with banks to make sure girls are operating respective accounts.
- Before any scholarship is provided, a baseline survey is conducted in each school at the beginning of each year.
- Field supervisors follow up dropout girls regularly to encourage them to return back to schools.
- TAF program staff monitor WDC activities on a quarterly basis, and WDC is required to submit various quarterly, biannual and yearly reports to TAF.

- WDC offered greater flexibility and responsiveness as an NGO than a government institution;

- WDC was also accountable to the donor NGO as well as to its own internal management;

- WDC was able to establish a good working relationship with the local government education office, schools, teachers, and parents, and to influence the formation of ten parent teacher associations (PTAs); and

- WDC offered an organizational structure that could quickly assume the day-to-day responsibilities of identifying and training staff and managing the program as well as physical facilities in or near the targeted community.

Three administrative elements contributed to FESP's management: the baseline survey on the status of girls' education in the communities concerned; organized management systems to be used in implementing and monitoring the program; and a system of financial accountability to minimize the misuse of funds.

Is FESP Sustainable?

FESP does not include any means of generating funds. Successful implementation of all aspects of the program therefore is dependent on a multi-year commitment from an outside funder or government agency, or some income-generating project. None of these was evident in the program description.

Nevertheless, it would appear that, with the increases in secondary school enrollment, parents and communities would begin to see the results and benefits of girls' education in a relatively short period of time—perhaps five to ten years. Communities might be motivated to continue enrolling their girls, even if scholarship funding was discontinued.

What Are the Possibilities for Widespread Proliferation?

FESP provided scholarships to all girls of government secondary schools in one district. Because most of the population is rural, the program might be beneficial in many other areas in Nepal. To replicate the program, finance is an important consideration, as funding would be needed for the scholarships and program administration. In addition, access issues would need to be addressed very carefully. For example, despite the baseline survey data on available spaces and resources that were collected before FESP scholarships are issued, FESP teachers commented that the increased enrollment put a strain on the school facilities and themselves due to the added workload (Maynard-Tucker 1994). While the FESP program design allows for some collection of baseline information, a more comprehensive assessment might be needed.

What Conditions Help Ensure the Intended Results?

Case study findings suggest that programs such as FESP can succeed if the following conditions exist:

- donor commitment for long-term funding;
- implementation through an experienced organization with field presence in the country concerned and experience working with local nongovernmental organizations or an experienced national organization. Such a nongovernmental organization could also work through local government organizations but implementation of the program would be much slower;
- commitment from a local NGO to provide management and day-to-day supervision;
- a relatively high density catchment area in order to minimize transportation costs and encourage participation in PTAs;
- a sufficient pool of candidates in the local communities to serve effectively as field supervisors and teachers;
- a culture in which parents will accept their children keeping and managing their own money; and
- banking facilities in rural areas that are accessible to the poor.

IV. SCHOOL FEEDING PROGRAMS: BUILDING ENROLLMENT, ATTENDANCE, AND RETENTION

HAITI

SCHOOL FEEDING: AN OVERVIEW

Feeding programs—programs that provide food to a child or her family—are commonly used to improve the nutritional health of children, and the overall welfare of a community in need. For decades, food has been distributed to needy populations through a variety of social organizations including NGOs and schools.

The correlation of nutrition and education is a logical one. The provision of nutrition often meets a basic need. Over one third of children under age five in developing countries suffer from protein-energy malnutrition (PEM), a condition that leads to a person's inability to remember or concentrate on what he/she is being taught (UNICEF 1995). A growing number of studies (Tietjen 1991; Brock and Cammish 1991; Safililios-Rothchild 1979) point to the fact that girls are more likely to suffer from under- or malnourishment than boys, especially in rural areas. For example, 79 percent of female infants exhibited retarded growth in one region of India, while only 43 percent of male infants did the same (Herz, Subbarao, Habib, and Raney 1991). According to UNICEF (1992), by the age of six in most developing countries, girls' health and nutritional status has started to decline in comparison to that of their brothers. Boys are fed with their fathers, while girls eat what is left over (UNICEF 1992).

As a result of their likelihood to be malnourished, girls are less able to benefit from school than their better-fed male counterparts (Brown 1990). Malnourished children, a higher proportion of which tend to be girls, are less motivated and attentive and rate lower on tests that measure achievement, IQ, and behavior (Bellew and King 1991). The World Bank concluded in 1989 that high dropout and repetition rates in African schools could be due, in part, to the reduced mental ability that is caused by micronutrient deficiency and poor nutrition (Herz, Subbarao, Habib, and Raney 1991). Brock and Cammish's (1991) position is that schemes to promote girls' education in poorer areas need to address problems of health and nutrition if they are to be successful.

Acting as an incentive, school feeding programs also address the costs associated with sending a girl to school. When families have limited resources, boys are the first to be sent to school while the girls are kept at home to provide labor. A girl's work in the household is important economically and is a substantial "disincentive to school enrollment" for parents of girls (ABEL 1992). The opportunity cost associated with sending a girl to school instead of using her in the fields or home is often thought to be greater than the benefits that could be reaped from sending that child to school. Feeding programs attempt to alter this calculation by, in effect, providing a transfer of income (Tietjen 1991). In some situations, "food is seen as a means to offset, for poor children . . . " and for girls, ". . . some or all of the costs of attending school, including expenditures for books, fees, uniforms, supplies, and transport as well as children's foregone earnings" (Bhoola 1992).

Types of Feeding Programs

School feeding programs are usually instituted at the primary level and provide meals for those who attend school on a regular basis. Two broad types of programs have been utilized: one, which provides a meal for the girls (and usually all students) during the school day; and a second, which provides food supplements for program participants to take home to their family. Beyond this distinction, there may be differences in the type of meal (a snack versus a full meal); the size and composition of the ration; and the target audience (feeding all students versus feeding only a targeted group) (Levinger 1986). For example, India's program of school feeding includes a mid-day meal consisting of a small bowl of bulgur wheat and vegetables, which is aimed at providing a quarter of a child's protein requirements and one fifth of their caloric intake (Select Committee on Hunger). Chile's program includes both a breakfast of crackers and hot milk and pre-prepared lunches that provide one third of a child's (10.5 years) daily requirements (Report on Implementation of the Chilean National Commission for Food and Nutrition School Feeding Project 1987). A school feeding program in Côte d'Ivoire to encourage attendance, which reaches 190,000 children through 1,800 canteens, provides 40 percent of their daily caloric needs and 50 percent of their protein requirements.

Outcomes

The success of these programs is a point of debate. Bellew and King (1991), for example, argue that there is little empirical evidence that points to a relationship between feeding programs and attendance or achievement. Nevertheless, there is evidence that supports the premise that school feeding programs that target girls as well as those that serve all needy children can have a positive impact on school enrollment, attendance, and achievement with a larger impact on girls' educational participation than boys. Positive outcomes have been reported in several areas:

- *Basic nutrition/relief of hunger*: In Haiti from 1981 to 1982, children enrolled in school feeding programs, even those most at risk for malnutrition, experienced a smaller decline in nutritional status than those who did not participate in school nutrition programs (Select Committee on Hunger 1987).

- *Enrollment*: Studies in Haiti suggest that school feeding programs have proven to be an important part of the calculation when parents decide whether or not to enroll their children in school (Tietjen 1991). In Tamil Nadu, India, enrollment increased 70 percent during the six months following the introduction of free meals in the schools. Studies in India document increases in enrollment when free meals are introduced, *and enrollment rates for girls in districts with school feeding programs were consistently higher than for those without programs (Select Committee on Hunger 1987).*

- *Attendance*: A study in the Dominican Republic cites a 19 percent drop in boys' attendance *and a 43 percent drop in girls' attendance,* for a cohort of first graders in rural areas, when feeding programs were discontinued, thus illustrating the potential for school feeding programs to directly affect and target girls especially (Levinger 1986). In Jamaica, school feeding programs have been found to be associated with higher attendance (Tietjen 1991).

- *Achievement*: The above mentioned study in Jamaica (Tietjen 1991) also showed that the breakfast program was associated with higher achievement in mathematics. Furthermore, a study by the Research Institute of Bourgogne at Dijon University found that learning (or "acquisitions") was associated, both positively and strongly, with the presence of school feeding programs in several developing countries (Moore 1994). Finally, a Haitian study concluded that a child's diet was the most important factor in classroom achievement (Bhoola 1992).

- *Persistence/Retention*: A feeding program instituted in Côte d'Ivoire to encourage attendance has not only resulted in improved health, *but also has caused girls to stay in school longer* (Odaga and Heneveld n.d.). Roy and Rath report that Indian schools with feeding programs had lower dropout rates (Bhoola 1992). There is evidence that the presence of canteens in school leads to fewer dropouts in Burkina Faso (Moore 1994).

Reports on school feeding, nevertheless, raise a few issues concerning the data, the impact, and the longevity of such programs.

Problems in data collection, such as a failure to use enrollment ratios that are based on solid demographic data, a failure to conduct longitudinal studies, and a failure to provide for control groups, (Levinger 1986) have limited the ability to objectively analyze their impact. Furthermore, some research issues, such as the impact of a snack versus a hot meal, the ration size, data which differentiates between boys and girls, and baseline data are often missing from research studies. Data are sometimes reported in aggregate, which makes it difficult to see the impact of programs on target groups, such as girls or ethnic minorities (Levinger 1986).

The continual disruption and attempted reshuffling of school feeding programs also bring into question whether the studies and their conclusions can be deemed reliable. The goal of many foreign or NGO-sponsored feeding programs is to provide for continuation of programs by turning them over to national and local governments and/or communities. As such, participating communities must provide some of the resources for the project, including personnel, equipment, and locally grown food. Programs are continually disrupted, rations are reduced, and some programs shut down altogether when local governments take over, due to budgetary considerations. Thus, issues of long-term impact cannot be properly studied because many programs do not last long enough, provide enough rations, or provide continuous coverage. The Select Committee on Hunger of the U.S. House of Representatives concluded in 1987 that "a policy response more appropriate than abruptly and prematurely phasing out programs would be to take measures to improve targeting and management," and to study how changes to existing programs could make them more successful (Select Committee on Hunger 1987).

Despite these limitations, the body of literature suggests that successful school feeding programs include the following features: selectivity within and between schools as to who is eligible for free food (e.g., only those who have a need, or only girls); a large number of days per year that children receive food, with few program disruptions or delays in delivery of food; and hot lunches/meals as opposed to snacks (Levinger 1986, Moore 1994). Findings also suggest that when there is a need for child labor—usually a higher demand for the labor of girls—and the labor can be put to use, school feeding programs can only work as incentives for girls where the ration size is substantial enough to provide a large enough transfer of income in the parent's opinion. School feeding programs are likely to be the most successful in "poor, stable rural areas" but not where the poverty is so great that no amount of food could offset the loss of a child's labor (Bhoola 1992; Levinger 1986). If school feeding programs are to be successful in encouraging girls' participation in the education system, the "income-transfer potential" of food must be fully utilized (Levinger 1986). Parents need to be informed of the economic advantages of sending their girls to school, and programs must provide enough food so as to act as a substantial boost to income, not just as a nutritional supplement.

Haiti: A Case Study

The case study of the Humanitarian Assistance Program in Haiti provides a description of one feeding program that was distributed through schools as well as other community organizations by an international donor. Food rations are not limited to girls but are provided to all of those children who are hungry.

CASE STUDY: PROGRAMME D'AIDE ALIMENTAIRE (FOOD AID PROGRAM)

Summary Information	
Country:	**Haiti**
Dates:	**1992-present**
Sponsoring Agency:	**Centre d'Étude et de Coopération Internationale (CECI)—International Studies and Cooperation Centre** **Agence Canadienne pour le Développement International (ACDI)—Canadian Agency for International Development**
Incentive Used:	**Food and Nutrition**

COUNTRY CONTEXT

Haiti is an island nation in the Caribbean that has a population of 6.5 million, 69.7 percent of whom live in rural areas (see Figure IV.1). With an area of 10,714 square miles, Haiti is one of the most densely populated countries in the Western Hemisphere. The local population is descended from black Africans who were brought to work as slaves for the French when it was under their rule from 1697 to 1791. Today, Haiti has two official languages: French, which is only used and understood by the most prosperous five percent of Haitians, who are of mixed European and African ancestry; and Haitian Creole, which is used by everyone (Nault 1994).

Haiti has one of the lowest per capita GNPs in the Western Hemisphere, with an average of $400 in 1991 (UNESCO 1991). Unemployment is estimated at 80 percent (Sarah 1995). Physical production per capita has fallen steadily as population pressure has forced peasants to cultivate more land; in some areas, farmers raise crops on slopes so steep that they must anchor themselves with rope to keep from sliding down the hillside. Because of poor diet and medical care, the average life expectancy is only 50 years (Nault 1994). Approximately 55 percent of Haitian children under age five are malnourished, weakened, lethargic, and vulnerable to disease ("Haiti's Long Road to Recovery" 1995).

Figure IV.I
Haiti: Major Social and Educational Indicators[1]

Indicator	Country			
	Guatemala	Nepal	Haiti	Pakistan
Per Capita Income (in US$)	$920	$170	$400	$370
% Rural	58%	90.4%	69.7%	68%
Compulsory Education	6 yrs	5 yrs	6 yrs	none
Free Education	1st grade - high school[2]	1st grade - 9th grade[3]	Tuition required for all grades	1st grade - 10th grade
Female Literacy Rates	47.1%	13.2%	47.4%	21.1%
Female Primary School Gross Enrollment Rate*	71%	57%	80%	28%
Female Secondary School Gross Enrollment Rate*	20%	17%	20%	12%

*The gross enrollment ratio is the total enrollment in the given level, regardless of age, divided by the population of the age group that officially corresponds to that level of schooling.

[1]Unless otherwise indicated, statistics are taken from UNESCO, *World Education Report 1991.*

[2]Registration fee is required.

[3]Rahman 1996

Exacerbating Haiti's situation is its history of political instability. The most recent significant political upheaval was in 1991 with the overthrow of elected president Jean Bertrand Aristide. The resulting turmoil combined with an international embargo against the military adversely affected the overall status of children, forcing thousands of boys and girls onto the streets in search of food and shelter (UNICEF 1995).

Status of Women

Women constitute 54 percent of the total population of Haiti, and 46 percent are heads of households. About 10 percent of the girls between five and nine years old, and 33 percent between 10 and 14 years are considered part of the economically active population (Comité Inter-Agences Femmes et Développement 1991).

The primary roles of rural Haitian women are child care, household management, and commerce. To a lesser extent, women are involved in agriculture, animal husbandry, and charcoal production. Non-agricultural employment opportunities for rural Haitian women are limited. The opportunities that do exist offer little potential for advancement, particularly when 50 percent of Haitian women are illiterate. Although rural women have expressed considerable interest in learning new skills and trades, they lack the literacy and educational background that are prerequisites to new sources of employment. The lack of access to a relevant educational system is one of the important factors placing severe restrictions on the employment options available to rural Haitian women (Smucker 1981).

The most common source of non-agricultural employment for women is domestic service. Other jobs open to women include gravel making, working at small-scale cassava-processing "factories," commercial weaving, factory work, salt collection, castor oil-making, handicrafts, health practitioners (usually midwives), home industry (such as a seamstress), and prostitution, which is usually undertaken by young women with few or no other economic options (Smucker 1981).

Educational System

The educational system in Haiti is divided into six years of primary school and seven years of secondary school. School is compulsory for all children through sixth grade. The majority of schools are private (85 percent and 95 percent at the primary and secondary levels, respectively) (Horblitt 1996), and tuition is required for all grades at both public and private schools. Together, these create a situation where the school system serves primarily wealthy families.

Barriers/Constraints to Girls' Education in Haiti

Cultural barriers still limit opportunities for girls and women. Although women play a large role in microenterprises, they traditionally have a low social status, and most girls are not encouraged to attend school or pursue careers ("Haiti's Long Road to Recovery" 1995).

For those who would accept girls attending school, other factors restrict participation. For example, the $50/year for tuition, uniforms, and supplies is 1/7 of the average net income ("Haiti's Long Road to Recovery" 1995). This amount is prohibitively expensive for most Haitians. These rates are the result of various deficiencies in the educational system. For example, the quality of instruction is inadequate in most private and public schools due to poor pre-service teacher training, low salaries, and lack of support from the public sector (Horblitt 1996). Many teachers are volunteers who average only four to seven years of primary education themselves (Gagne 1995).

In addition, education has received little financial support from international agencies in the period following the coup. As a result, institutional development has been slowed and the school infrastructure has suffered, with only 40 percent of primary schools and half of secondary schools operating normally. In the 1991-92 school year alone, there was an estimated 27 percent drop in enrollment (Horblitt 1996).

Other barriers can be linked to Haiti's ability to meet the basic needs of the population. Only 50 percent of primary school-aged children attend school because of the lack of schools and the poor health of children. Attendance is difficult for children who have to walk over an hour to school and is reduced by the poor health and nutritional status of the children (World Bank 1991). In rural areas, over 50 percent of school-age children are malnourished (Horblitt 1996). The traditional reliance on child labor also make education inaccessible to many, particularly the children of large and poor families. As a result, there are large rural-urban disparities in school attendance; 34 percent of rural children complete the first four grades, as compared to 52 percent of urban students (World Bank 1991).

Illustrative Efforts to Improve Girls' Education

A variety of efforts have been made to equalize schooling opportunities for poorer families in Haiti. In 1976, for example, programs implemented by the Salvation Army, Salesian Fathers, the Church of Nazarene, (and others) paid for students' uniforms, shoes, books, registration fees, and two-thirds of tuition. This brought the direct cost of schooling down to $0.70 per student per month, the lowest price available at that time (Fass 1988). School feeding programs, which were supported with grants of surplus commodities primarily from the USAID Title II program and cash grants from PVOs, also enabled poor families to enroll their children. Feeding proved to be a powerful incentive for attracting children to school, particularly for very poor families. School feeding programs expanded at an average annual rate of 12 percent from 1976 to 1984.

Other programs that are specifically targeted to Haitian women and girls include CINEC (Centres Intégrés de Nutrition et d'Education Communautaire), a program that provides food and training for mothers and care for young children and CHREPORF (Centre Haïtien de Recherches pour la Promotion Féminine), a program that teaches functional literacy in French as well as some English, and operates a job placement service (Smucker 1981).

PROGRAM DESCRIPTION

Program Features

The Humanitarian Assistance Program (PAH) is a comprehensive assistance program financed by the Canadian Government, through the Agence Canadienne pour le Développement International (ACDI). Initially implemented in September 1992, with the Centre d'Étude et de Coopération Internationale (CECI) as the executing agent and CARE as the implementing agency, CECI works to identify local vendors, select and obtain foods for distribution, and solicit organizations/communities to participate. CARE then distributes the food to participating schools and other organizations (CECI n.d.). CIDA has already invested over $6 million in the program. In addition, the Office of Nutrition and Development provides regular donations of rice to the program.

In FY 1994, CARE carried out a series of assessments and began to take action to modify the food aid program, moving from a "stand-alone entitlement program to a supplementary effort to support other development activities." (Care International/Haiti 1995). Food aid was included as a component of a broader educational enhancement strategy and of the Child Survival Maternal Child health model. In modifying the focus of its food aid initiative, CARE adopted two criteria for inclusion: high levels of accountability; and delivery within a context in which concrete impact must be demonstrated.

The program's intermediate goals are to increase the level of community participation in the management of the feeding centers, with the management of the school feeding centers being shared by the school directors and appropriate community groups, and to increase school enrollment and attendance, especially of female students. Female student school enrollment in CARE-assisted schools was to increase by 50 percent over the baseline, and attendance at CARE-assisted schools was to increase by 50 percent over the baseline for 95 percent of the school days (CARE International/Haiti 1995).

Food Acquisition

In designing the feeding program, planners carefully considered the local availability of food products and the production potential of the local community. The results of this evaluation demonstrated the need for complete provision of cereal grains,[4] for partial

[4]Rice is provided by the Office of Nutrition and Development.

provision of legumes (beans and peas), and for total importation of vegetable oil. Either purchase contracts or production contracts with price guarantees are used to acquire local products. Contract allocation is determined based on the types of available providers, e.g., firms, traditional merchants,[5] individual growers, cooperatives, and peasant group), the harvest times in different regions of the country, distribution need, and the geographical distribution of suppliers. These criteria guarantee regular provision while reducing the risk of price destabilization, which could occur if too much of the production is taken from one area or during one time period.

Products are purchased from the suppliers in their unrefined form, e.g., corn grains, unhusked sorghum, and stored in the CECI central warehouse in Port-au-Prince. As distribution needs arise, contracts are negotiated with cereal grain refineries. The refining process results both in finished products ready for consumption (e.g., ground corn, husked sorghum, AK1000[6]), and in by-products. The finished products are collected from the refineries by CECI, warehoused, and distributed as necessary. The by-products are sold to farmers engaged in animal husbandry, especially those raising pigs and chickens.

Distribution

Canadian and local products in the Humanitarian Assistance Program are distributed to schools, as well as to clinics, dispensaries, and shelters. It is important to note that CECI uses locally available transportation for this distribution, as the organization opted not to equip itself with its own system of transport. This choice is consistent with CECI's overall approach to intervention, which favors involvement of local institutions and services.

Beneficiaries are selected based on three fundamental criteria:

- the level of need of the population at the receiving institutions;
- the absence of other food programs, in order to avoid duplication; and
- management and administrative abilities of the institutions as well as staff dedication, in order to limit wastage and fraud.

Finally, CECI gives priority to those institutions that prepare food on the premises, as this permits better control and provides a better guarantee that those who receive the products are indeed the target beneficiaries.

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[5] Called *Madam Sara*, these traditional market women play an essential role in the collection and distribution of foodstuffs in the country.

[6] A protein-rich product consisting of one part legumes and two parts cereals, used in nutritional rehabilitation programs.

Monitoring

One of the most important factors in assuring good program management in food aid is the exactitude and the regularity of follow-up monitoring to help insure the appropriate and timely use of the available resources. With this principle in mind, CECI instituted a rigorous monitoring system based on the following elements:

- a high density of monitoring agents (approximately one agent per 30 beneficiary groups) to assure at least monthly inspection of each institution and a rapid response capacity in case of difficulties;
- rigorous selection of monitoring agents, involving recruitment of high-level professionals capable of analyzing a situation and making on-site decisions; and
- simple but efficient monitoring tools for collecting and analyzing data.

PAH Program Results

The following figures present the major program accomplishments over the past three years.

Figure IV.2. Synthesis of Food Ration Distribution

Year	1	2	3
Number of Organizations	203	240	229
Number of Beneficiaries	52,509	61,535	58,002
Number of Meals	6,631,812	6,310,200	5,879,355

Source: Monde 1995

During this period, a total of 18,821,367 meals were distributed, or an average of 6,273,789 meals per year. Food aid was furnished to an average of 57,349 beneficiaries through approximately 224 institutions. In order to supply the 18,821,367 meals, it was necessary to purchase 5,708.4 metric tons of food products.[7] Figure IV.3 shows these purchases according to product origin. Using data indicated in this figure, 72 percent of the total volume of products was purchased on the local market, and 28 percent was purchased in Canada.

[7]To this, about 1,000 tons of rice furnished by the Office of Nutrition and Development should be added.

Figure IV.3 Source of Product Purchases

Product Purchases (in metric tons)				
Source	Year 1	Year 2	Year 3	Total
Haiti	891	1752.4	1454.4	4097.8
Canada	493	561	556.6	1610.6
Total	1,374	2,313.4	2,011.0	5708.4

Source: Monde 1995

These purchases, as well as the subsequent refining processes, resulted in an infusion of capital into the agricultural economy, which is summarized in the following figure.

Figure IV.4. Purchase Price and Processing Costs of Local Products[8]

Year	1	2	3	Total
Purchase	3,294,074	7,691,712	9,299,175	20,284,961
Processing	586,092	1,555,000	1,331,630	3,472,722
Total	3,880,166	9,246,712	10,630,805	23,757,683

Source: Monde 1995

To the 23,757,683 gourdes invested directly in the purchase and processing of agricultural products, one must add approximately 1,000,000 gourdes invested in the transport of these products. If one considers operational costs as representing local expenditure, one can estimate *that over 70 percent of the program budget has been invested in the country.* This compares favorably with other programs of this type, in which typically only 18-20 percent of the budgeted monies are actually spent locally.

Although originally scheduled to start at the beginning of the 1993-94 school year, distributions to schools did not begin until April 1994 (CARE International/Haiti 1995). Once started, however, CARE was able to distribute food rapidly. In addition, because of the need, CARE continued to distribute food through the schools during the summer, thereby helping to ensure that children would in better health when school began in the fall (CAII International/Haiti 1995). Food was distributed from the targeted schools for girls and boys.

[8]Costs are expressed in Haitian Gourdes. During the period under consideration, the exchange rate was 12 Gourdes to one U.S. dollar.

As reported by CARE International in Haiti, no specific, additional programmatic efforts were taken in FY 1994 to promote school attendance by girls.

As with all other food aid programs, PAH has had an effect on nutrition levels. At this early stage, however, it is difficult to directly evaluate this effect, as there are a number of variables to be considered. Indeed, because PAH provides a nutritional complement, the program's effect on nutrition would depend in large measure on the quantity and quality of foodstuffs already available to beneficiaries. Other factors must be taken into consideration as well, such as the distance traveled by children to attend school.

As a reliable system for measuring nutritional impact is not yet in place, CECI elected to conduct an indirect evaluation of the program by analyzing several school-related factors. They identified the following outcomes.

- *Increase in School Enrollment Rates*. A comparison of the average school enrollment rate at the beginning of the school year (before the provision of food) with the rate observed after the schools had signed up for the program indicated a significant increase in student enrollment and attendance with the addition of the program, in some cases doubling the original enrollment and attendance figures. Ninety percent of the school directors contacted believe that the increase was linked to the program. The increase is explained by the fact that the guarantee offered to parents that their children would have at least one balanced meal per day served as a strong incentive that increased the propensity of parents to send their children to school. Although precise data are lacking, one might speculate that this type of program facilitates the enrollment of girls. In Haiti, especially in the rural areas, parents have a tendency to educate only their boys. A program that encourages more widespread participation in school will offer parents a new opportunity to send their girls to school.

- *Absence Rates*. Although data were not collected, the guarantee of a meal at school encourages increased regularity of attendance. The impact of the program on school attendance would have been less had foodstuffs simply been distributed to the population. In addition, those schools having infirmaries reported a reduction in the number of student infirmary visits.

- *Decrease in Dropout Rates*. In Haiti, it is well known that a high enrollment rate is not a guarantee of persistence in school. The number of school dropouts generally increases significantly in March, the time of year when it becomes more difficult for families to provide adequate food for themselves. In this period, many children have difficulty attending class, as they must participate in working the fields or must dedicate a greater amount of their time to seeking increasingly scarce food. Supplying food regularly to school canteens has reduced the dropout rate significantly. Thirty-nine percent of schools surveyed saw their dropout rates decrease by at least 7 percent.

- *Increase in the Effective Length of the School Day.* Theoretically, the school day in Haiti is six hours long, including a half-hour break. In general, school begins at eight in the morning and ends at two in the afternoon. A large number of children (and teachers), however, arrive at school having not eaten and are no longer totally attentive after 11:00 a.m. School staff members have observed that when these students eat at school, the period of their ability to learn is lengthened by two to three hours. Seventy-five percent of the schools reported a two-hour increase, and 25 percent reported an increase of three hours. The effect is not as great however, if the food is not distributed before 11:00 a.m. For this reason, CECI permitted participating schools to acquire the equipment necessary (steam tables, cauldrons, etc.) so that meals could be prepared and served at an early hour.

- *Increased Pass Rate.* More regular class attendance and a lengthening of the effective instructional day have combined to increase the school pass rate. Twenty-one percent of the schools showed an increase in pass rates of 1 to 7 percent, while 33 percent of schools had a rate increase between 8 and 15 percent (Monde 1995).

In addition, anecdotal evidence provided by CARE International (1995) indicates that the presence of the school feeding program in an institution renders school "more attractive to parents." Children are reported to be more likely to stay in school the entire school day and continue attending school during the entire year if food is served. Because the school feeding programs can help private as well as public schools attract students, CARE also considers the school feeding an incentive for the private schools to come into compliance with educational standards.

The effects mentioned above could be common to all food assistance programs. However, two particular aspects of the CECI-PAH program should be underlined:

- The products distributed require no adaptation or adjustment in the eating habits of the recipients. Foods distributed are among those found in the regular diet of the population. No rejection of food has been noted, nor has any digestive difficulty been reported from these products.

- The distribution of products purchased for the most part on the local market allows the program to reverse a major psychological block associated with food aid. Even when food aid is considered necessary, it attracts considerable controversy because for almost all analysts, it has been seen as both a manner of maintaining the recipient country in a dependent situation and of ridding donor countries of surplus production, thus maintaining donor country agricultural price levels. Some go so far as to say that the food products distributed in poor countries are reserved strictly for

animal consumption in richer countries. The distribution of local products removes such criticisms, and recipients are able to maintain their dignity while receiving useful assistance.

In addition to the impact linked to education, the CECI-PAH program has had major impact in other economic sectors. The general program strategy of CECI has been to utilize as much as possible local services, resources, and institutions, injecting capital to reinvigorate them and placing their personnel in a better economic situation. To this end, service contracts have been signed with local producers, food processors, farmers, truckers, and local artisans.

This program also allows CECI to rise above the traditional cleavage and antagonism between non-governmental organizations and the private sector. The complementary use of resources has shown itself to be a cost-effective and successful original intervention, as much as by its spirit as by its strategy.

Cost Information

Using the purchase and processing prices listed in Figure IV.4 for years one, two, and three, the calculated cost of the program over a three-year period is 23,757,683 gourdes (about US$ 1,979,807). Using this total and the average number of beneficiaries over three years calculated from figures in Figure IV.2, the average cost per recipient per year might be estimated using the following calculations:

CALCULATED COST OVER 3-YEAR PERIOD:	23,757,683 GOURDES (US$1,979,807)
AVERAGE PURCHASING/PROCESSING COST PER YEAR:	US$1,979,807 ÷ 3 = US$659,936
AVERAGE NUMBER OF BENEFICIARIES PER YEAR:	57,348
CALCULATED COST PER YEAR PER BENEFICIARY:	US$11.51

Conversion of gourdes to US dollars is based on a conversion rate of 12 gourdes=US$1, the conversion rate in 1994 (CARE International 1995).

DISCUSSION

Is the School Feeding Program of the CECI Humanitarian Assistance Program to Haiti Effective?

The case study documents that the CECI Humanitarian Assistance program is effective in distributing food to a designated community of people in a specified period of time. As indicated in the case study, the food was distributed to the community through a variety of organizations. Unfortunately, the data provided did not indicate how much food was distributed through the schools and how many of the beneficiaries were reached by the schools as opposed to the other organizations. It should be noted that meals were distributed to boys and girls who attended school.

The informal evaluation provided by CECI provides some preliminary evidence that the school feeding program contributed to an increase in school enrollment rates, a decrease in dropout rates, and an increase in the effective length of the school day, and also may have led to increased pass rates. If calculations are correct, the US$11 invested in each recipient is minimal in comparison to expenditures for other incentive programs. Unfortunately, without disaggregated data by gender on the percentage of increase in enrollment, attendance, and dropout, it is difficult to compare changes attributed to school feeding with changes attributed to scholarships or other incentives.

What Elements Contribute to Its Effectiveness?

The widespread poverty and malnutrition, which is particularly acute in the rural areas, made the provision of food to children a primary concern. Because schools were one of the established community organizations, schools seem to be a viable distribution point. In addition, the known effects of health and nutrition on class performance provided a second link between feeding programs and the schools. The combination of poverty, malnutrition, and the availability of schools worked together to contribute to the community receptiveness to a school feeding program.

As mentioned in the chapter overview, research shows that successful feeding programs are often characterized by four elements:

- selectivity in who receives the food;
- few delays in the actual delivery and implementation;
- the distribution of hot meals/lunches rather than snacks; and
- the distribution of a substantial ration to provide adequate compensation when the need for child labor is great.

Several of these elements are present in CECI's school feeding program. The program is selective at the macro level in the sense that beneficiary organizations are selected based on the level of need of the population and other specific criteria. Once the school or other organizations are selected, however, it appears that the food provision is available to all enrolled; there is no evidence to suggest that certain children are selected from within the school to receive the food or that girls participate in the feeding program while the boys do not. Although the actual start up was significantly delayed (from October 1993 to April 1994), the case study indicates that once the program was actually started, distribution went smoothly and continuously. Lunches, rather than snacks were prepared and distributed daily at the actual school site.

In addition to the elements generally present for successful feeding programs, the PAH feeding program incorporates two elements that are present in other promising incentive programs. One is local involvement. Food products are purchased from local businesses. Local vendors rather than a CECI staff driver are used to transport food to the benefitting organizations. This type of involvement, where the community benefits economically through jobs and income, differs from involvement seen in other educational incentive programs but still may result in community commitment to the project, although admittedly for different motives. One might assume, although it was unstated, that community members participate in preparing and serving the food.

The second element that is found in other promising programs is the tailoring of the program to a particular targeted community. In a country where food is scarce, food seems to be a more motivating incentive to parents than perhaps books or even scholarships. At a lower level, the selection of the types of food that was provided was based on a careful evaluation of the local availability of food products, the local production potential, and the kinds of food that are accepted by the target population.

Administratively, monitoring has been identified as an essential feature. Careful selection of monitoring agents, simple but efficient monitoring tools, and a high density of monitoring agents to assure at least monthly inspection of each institution were recommended by the case study writer.

Is the School Feeding Program Sustainable?

In light of Kohn's (1993) concerns that distribution of an incentive will soon become an "expectation," and that the incentive will lose its motivational quality, one question that might need to be considered is, "Do the meals need to continue?" None of the data provided indicate that the feeding program lost any appeal or impact over time, and thus it appears that the meals would not need to be augmented with new or expanded awards. Nevertheless, it appears that without a significant change to the economic situation, the meals would need to continue if continued improvements in enrollment are desired. Even if parents and girls realize the importance of education and parents are motivated to send their daughters to school, if the daily meal is eliminated the need to find food may force girls out of school. Levinger's research (1986) shows that in at least one situation, when

meals are withdrawn, the dropout rate increases significantly, with even higher percentages of dropout for girls. Once feeding is started, it appears that the program needs to be sustained.

The program builds in some level of sustainability in that the food is purchased from local vendors and transported via local transport agencies. Thus, the mechanisms for continuing the program have at least been established. Nevertheless, there seems to be no means for the project to produce the food itself or to generate funds locally to purchase food. Therefore, it appears that a funder would always be needed if the program is to continue.

What Are the Possibilities for Widespread Proliferation?

The use of local vendors and food stocks to supply needed food and of local schools to distribute free meals seems to be workable. The possibilities for proliferation seem to lie in program funding. Outside funding or another means of providing the food is needed.

What Conditions Help Ensure the Intended Results?

The research suggests that the following conditions help insure the intended results:

- levels of poverty and malnutrition where food would be a motivational factor;
- an agency willing to provide multi-year funding for the feeding effort;
- school system willing to participate;
- a community willing to prepare and serve meals daily; and
- a local group that can oversee implementation and monitor distribution.

V. INCENTIVE PACKAGES: COMBINING INCENTIVES AND OTHER INTERVENTIONS

PAKISTAN

INCENTIVE PACKAGES: AN OVERVIEW

While achieving some positive results when used alone or in combination with other types of support, scholarships, food, and other incentives can be used together or combined with other interventions in an effort to multiply their impact on girls' school participation at the primary and secondary levels.

Several countries have tried or are implementing programs using this strategy. In Bangladesh, for example, USAID pilot tested the Bangladesh Fourth Primary Education Project, an initiative designed to address several household and school level barriers to girls' enrollment in primary school. From 1986 to 1990, school facilities were improved, free textbooks were provided, the numbers of female teachers were increased, and scholarships were provided for girls. Girls' enrollment increased by nine percent in the areas with the project, as compared to only two percent in the areas without the project (Herz 1991).

In Malaysia, the government began offering free primary education, a textbook loan scheme, a supplementary feeding program, and scholarships for the needy at the secondary level. Higher enrollment rates were recorded as a result of these measures (Tilak n.d.).

Morocco's Rural Basic Education Project was started in 1991 by the Moroccan government to help increase enrollment at the secondary level of basic education. The project includes the building of new schools, which should help address the issue of distance from school for many girls. Scholarships for room and board were offered, with half of all scholarships reserved for girls (Herz 1991).

The following case study describes the Pakistan Sindh Education Development Project, a comprehensive program being implemented by the Education Department of the Government of Sindh, with funding from several international organizations. Started in 1990, the project includes a variety of strategies to address access, quality, and cost barriers. A package of incentives designed to increase enrollment and retention in rural and slum areas, particularly for girls, is a part of this multifaceted effort.

CASE STUDY: SINDH PRIMARY EDUCATION DEVELOPMENT PROGRAM

Summary Information

Country:	Pakistan
Sponsoring Agencies:	International Development Association, NORAD (Norwegian Aid), Overseas Development Administration (ODA), and the Government of Sindh.
Implementation:	1990-present. Initially a five-year project (1990-1994); not all targets were reached, and implementation continues.
Incentives Used:	A variety of incentives, including feeding, free textbooks for rural girls in primary schools, scholarships and the elimination of the school uniform requirements for girls in grades 6 to 10, and financial awards to primary school teachers and teacher trainers for the development of innovative teaching aids.
Other Motivators:	Replacement of dangerous buildings and shelterless schools with new buildings; provision of other physical requirements such as classroom benches, blackboards, and sanitation and water supply facilities; school maintenance.
Target Groups Served:	• Pilot nutrition program—primary school children in five Sindh districts (Thatta, Badin, Mirphurkhas, Tharparkar, and Umerket) • Free textbooks—low-income girls in rural areas in primary school, grades 1 to 5. • Scholarship program—rural girl students (grades 6-10) in each district of the Sindh province. • Financial awards to teachers and teacher trainers—women in rural areas

COUNTRY CONTEXT

Pakistan is a South Asian country that gained its independence in 1947. With an estimated 130 million people, Pakistan is the ninth most populous country in the world (National Institute of Population Studies 1992). Its population is multi-ethnic and multi-lingual, with cultures that reflect Central Asian, Persian, British, and Muslim influences. Although Urdu is the official language, 24 languages are spoken.

Pakistan is divided into four provinces: Punjab, Sindh, the Northwestern Frontier Province (NWFP), and Baluchistan. The population is unevenly distributed throughout the provinces, with more than half of the total population living in Punjab and about 23 percent of the population living in Sindh (National Institute of Population Studies 1992). Sixty-eight percent of the population live in the country's rural areas and have their own culture and traditions.

People earn their living making carpets, handicrafts, and textiles. Pottery, woodwork, and metal craft are common cottage industries. Basketry, mat weaving, and cane furniture making also are common. Since becoming an independent nation, geographical disputes, political instability, and civil war have damaged the economy. The gross national product (GNP) in 1992-93, at factor cost, was Rs.1234,856 million (US $ 41,161.86 billion at the conversion rate of Rs.30/- per one dollar). The national per capita income is US$ 370 (UNDP 1991). Malnutrition is widespread, with about 48 percent of children under five years of age suffering from chronic malnutrition and 11 percent suffering from acute malnutrition (The World Bank 1990).

The current literacy rate in Pakistan is estimated at 37 percent. Like in other areas, disparity exists between the rural/urban populations: the literacy rate in rural populations is 28 percent, while the literacy rate in urban areas is 58 percent (Eco:Survey 1994/95). A disparity also exists between the male/female population: male literacy is about 47 percent, while female literacy is about 21 percent (UNESCO 1991). A summary profile is provided in Figure V.1.

Status of Women

As in most traditional societies, in the traditional Pakistani family there is a distinct separation between the roles and responsibilities of males and females. Women are expected to maintain the household, bring up children, and cater to the needs of men. In addition, women play the major role in agriculture and livestock-rearing. Men, on the other hand, are expected to represent the family to the outside world. Under purdah, which incorporates a range of cultural practices for women involving dress code, authority patterns, seclusion from all men except close relatives, strict divisions of labor, and prevalent concepts of honor based on the behavior of female relatives, women are usually prevented from associating with men other than those in their immediate families. This proscription, coupled with long working hours, places women, particularly rural women, in

a very isolated position. It is difficult for a woman to travel away from her homestead or community, take advantage of existing programs staffed primarily by men, gain access to training, or obtain credit from financial institutions.

Figure V.1
Pakistan: Major Social and Educational Indicators[1]

Indicator	Country			
	Guatemala	Nepal	Haiti	Pakistan
Per Capita Income (in US$)	$920	$170	$400	$430
% Rural	58%	90.4%	69.7%	68%
Compulsory Education	6 yrs	5 yrs	6 yrs	none
Free Education	1st grade - high school[2]	1st grade - 9th grade[3]	Tuition required for all grades	1st grade - 10th grade
Female Literacy Rates	47.1%	13.2%	47.4%	21.1%
Female Primary School Gross Enrollment Rate*	71%	57%	80%	28%
Female Secondary School Gross Enrollment Rate*	20%	17%	20%	20%

*The gross enrollment ratio is the total enrollment in the given level, regardless of age, divided by the population of the age group that officially corresponds to that level of schooling.

[1] Unless otherwise indicated, statistics are taken from UNESCO, *World Development Report 1991.*

[2] Registration fee is required.

[3] Rahman '96

The authority of men over women, and elders over juniors, is strongly displayed in the traditional family. Men, and in particular older men, make decisions for the family and act as guardians both of children and of adult women. In other words, a woman is passed from the guardianship of her father to that of her husband, and perhaps finally to that of her son. Nevertheless, the most extreme forms of purdah—the seclusion of women from public observation—are not, and have never been, fully followed or observed by the masses of rural people and are less prevalent in urban areas.

Men are allowed to have up to four wives at the same time. Marriage is not regarded as indissoluble, with divorce being relatively easy for men. Both of these aspects, however, have been modified to the benefit of women by Pakistan's Muslim Family Laws Ordinance of 1961 and are observed in some parts of the country. In fact, neither divorce nor polygamy is statistically highly prevalent, although the possibility of their occurrence arguably adds insecurity to women's lives.

Although Islamic inheritance laws stipulate that a daughter receives half of a son's share on the death of a parent, in practice, these laws are often ignored or circumvented by way of dowry or by occasional presents from a woman's brothers. All over Pakistan, women do not receive their Islamic share of inheritance. In other cases, although women inherit nominal ownership of property and thus own more than one third of the real estate, their brothers exercise real control. More complex rules, which also vary by sect, govern inheritance by widows and other relatives.

Educational System

About two percent of Pakistan's GNP is allotted to education, with less than 1 percent of that allocated to primary education (Akram 1993). Although the universalization of primary education has been included in several five-year plans, these goals are far from realized. Rapid population growth has outpaced progress resulting from various initiatives. Despite significant increases in primary school enrollment—from .77 million in 1948 to 12.4 million in 1992—the overall primary level participation rate is less than 50 percent (ODA n.d.).

The formal public educational system offers education as follows: primary school—grades 1-5; elementary school—grades 6-8; and secondary school—grades 9 and 10. Education is free for the primary level. This basic education is provided through government primary schools but also through "Mosque Schools" that are also supported by the government sector. At the national level, about 34,900 schools are providing education.

Status of Female Education

Nationally, girls' enrollment is about 50 percent lower than boys' enrollment at the primary, elementary, and secondary levels (see Figure V.2). Most families in urban areas choose to send their girls to school because they have experienced some difficulties in the marriage of illiterate girls. In rural areas, however, communities have not yet fully realized

the importance of girls' education. Reasons often offered for this include purdah and related customs, the need for girls to do housework, sometimes while the mother works, the unwillingness to invest in a girl who will move to another family after marriage, and early marriage, which is not necessarily affected by income, parental education, or involvement of mothers in paid work.

Figure V.2
Pakistan's Enrollment, by Gender, at Primary, Elementary, and Secondary Levels

Students	Primary	Elementary	Secondary
Boys	7,329,739 (65%)	1,866,115 (69%)	716,450 (71%)
Girls	3,896,447 (34%)	823,958 (31%)	291,879 (29%)
Total	11,226,186	2,690,073	1,008,329

Source: AEPAM 1995.

While limited education for girls has long been the tradition, a 1991 survey in NWFP indicated that attitudes are changing and the demand for girls' education is increasing (ODA n.d.). More parents are willing to send their daughters to schools with boys if there is a female teacher. The current Prime Minister of Pakistan, Benazir Bhutto, has emphasized girls' education through social action programs. Radio, television, and the print media have been used to mobilize the people and communicate the importance of girls' education.

The Sindh Province has a slightly lower average of female school participation than the nation as a whole. In the 1981 census, the literacy ratio of the country among the population aged 10 years and above was 26.2 percent (47 percent in urban areas and 17.3 percent in rural areas).[4] During that time, the female literacy rate in the Sindh Province was 42.2 percent in urban areas and 5.2 percent in the rural areas. At the national level, girls' enrollment in primary schools (Grades 1 to 5) is 3,896,447, of which 66 percent (2,571,655) live in rural areas. In the Sindh Province, enrollment for girls in the rural areas is slightly lower than the national average, with 49 percent (347,922) of the total of 699,071 girls enrolled in rural areas (See Figure V.3). While the percentages of rural girls in elementary (Grades 6-8) and secondary grades (Grades 9 and 10) are 44 percent and 31 percent respectively at the national level, in the Sindh Province, the percentages of rural girls who make up the girls' enrollment population are significantly lower, with only 16 percent at the elementary level and 11 percent at the secondary school level.

[4] In the 1981 census, the question to enquire whether a person was literate or not was worded as "whether a person can read a newspaper and write a simple letter while in the 1972 Population census it was asked whether a person could read and write with understanding. Although their meanings are the same, it is possible that it might have resulted in a little lower rate of positive responses regarding literacy in 1981 because of its wording. However, in both the censuses all those who had passed primary level were ipso-facto deemed as literate.

Figure V.3
Girls' Primary, Elementary, and Secondary Enrollment: National and Sindh Province Data, 1992-1993

Level	National		Sindh	
	Total Enrollment	Rural Enrollment	Total Enrollment	Rural Enrollment
Primary (Classes 1-5)	3,896,447	2,571,655	699,071	347,922
Elementary (Classes 6-8)	823,958	366,920	171,854	28,118
Secondary (Classes 9-10)	291,879	90,526	76,446	8,635

Source: Balouch 1996.

Barriers/Constraints to Girls' Education in Pakistan

Several studies have been carried out by different national and provincial agencies to identify the factors affecting participation at the primary level (Khalid 1990; Qureshi n.d.; Chaudhary 1988; UNESCO 1987; Bhatti et al. n.d.). These studies highlighted a variety of in-school and out-of-school factors (see Figure V.4).

Illustrative Efforts to Improve Girls' Education

The importance of girls' education has long been recognized and emphasized in the national five-year plans and national education policies. As early as 1979, the national education policy gave more attention to girls' education and called for a variety of special efforts, including improved facilities for the education of females, the recruitment of more female teachers, the construction of boundary walls around existing primary schools, and a greater share to be apportioned to the education of females in all other programs envisaged under primary education. The Fifth Five- Year Plan (1978-83) emphasized programs for the expansion of girls' education at the primary level and established goals for increasing girls' enrollment, school construction, admissions, and residences for female teachers. Different innovative approaches, including teacher coordinators, teaching kits, addition of the formal curriculum into Mosque schools, residences for female teachers, and drop-in schools[5] have been implemented to promote primary education (Warwick, Reimers, and McGinn 1989).

[5]Drop-in schools were government-operated schools for children ages 10-14 who either had never attended school or had not completed school Classes, which were taught by commission-appointed teachers, were provided during the afternoon or evening in existing government schools. Each school offered three hours of instruction per day.

Figure V.4
Factors Affecting Girls' Educational Participation in Pakistan

In-School Factors	Out-of-School Factors
- Low starting base of female enrollment	- High population growth rate
- Poor physical facilities	- General poverty of the masses
- Imbalance in enrollment between boys and girls in educational schools.	- Socio-cultural barriers
- Lack of qualified female teachers	- Lack of interest of parents in rural areas in education of their girls
- Absenteeism among teachers	- Lack of awareness
- Inadequate learning materials	- Difficulty in recruiting female teachers for rural schools
- Unattractive service conditions in rural areas for women teachers	- Inadequate school-community interaction
- Irrelevant and overloaded curricula	- Lack of incentives for parents to send girls to schools
- Rigid timetable/schedule of school	- Inadequate demand for education
- Content of education reinforcing tradition	- Rural prejudice against female education
- Limited availability of schools for girls	- Early marriages and Purdah considerations
	- Rural view that female education is useless
	- Female teachers who are not satisfied with their terms and conditions of service, attributable mainly to their low income and limited prospects of upward mobility

In addition, the following special projects were launched:

- *Primary Education Project (PEP)*: A World Bank project conducted from 1979-1985 in cooperation with the Government of Pakistan to increase access to primary education, reduce dropout, improve educational quality, reduce costs, and otherwise improve the efficiency of the primary education system (Warwick, Reimers, and McGinn 1989). This project financed the construction of about 1,000 classrooms, salaries for assistant teachers, in-service teacher training, textbooks, teachers' guides, library books, classroom furnishings, and learning coordinators who visited classes and monitored teacher performance.

- *The Rural Education and Development Project (READ)*: provides services to a package of five components, i.e., mosque schools, women's education centers, village workshops, community viewing centers, and village adult literacy centers.

- *The Girls' Primary Education Development Project*: includes schools supported by the World Bank and the Asian Development Bank where women who observe purdah and who can read and write teach the Holy Quran Islamiat and home management skills such as embroidery to young girls in their homes.

- *The Aasthan Latif Welfare Society, Thatta*: provides, through UNICEF financing, education for 10,000 girls in 330 schools.

- *Pakistan Primary Education Development Program (PEDP)*: A USAID-funded program from 1989-1994 designed to increase access to and the quality of primary education in Pakistan's Northwestern Frontier and Baluchistan provinces. The program strengthened the provinces' institutional capacity to formulate and implement policy, increased access and equity, and improved the quality and efficiency of primary education, particularly for girls. Project activities included improving the quality of primary school learning materials and redesigning teacher training.

Summary

Pakistan is a very low-income country where the gap in girls' and boys' enrollment is pronounced, particularly in the rural areas. School is not compulsory, the number of school places and quality of instruction discourage school participation, and cultural traditions severely restrict girls' activities. Several programs have been implemented to improve primary education at the national level and in the Northwestern Frontier and Baluchistan Provinces. Sindh, one of the country's most rural provinces, had particularly low

participation rates for girls. With 23 percent of the population living in Sindh, a program that would bring about improvements in girls' education in that province would contribute to significant changes in literacy rates for the country as a whole and might provide a model that other provinces could adapt.

PROGRAM DESCRIPTION

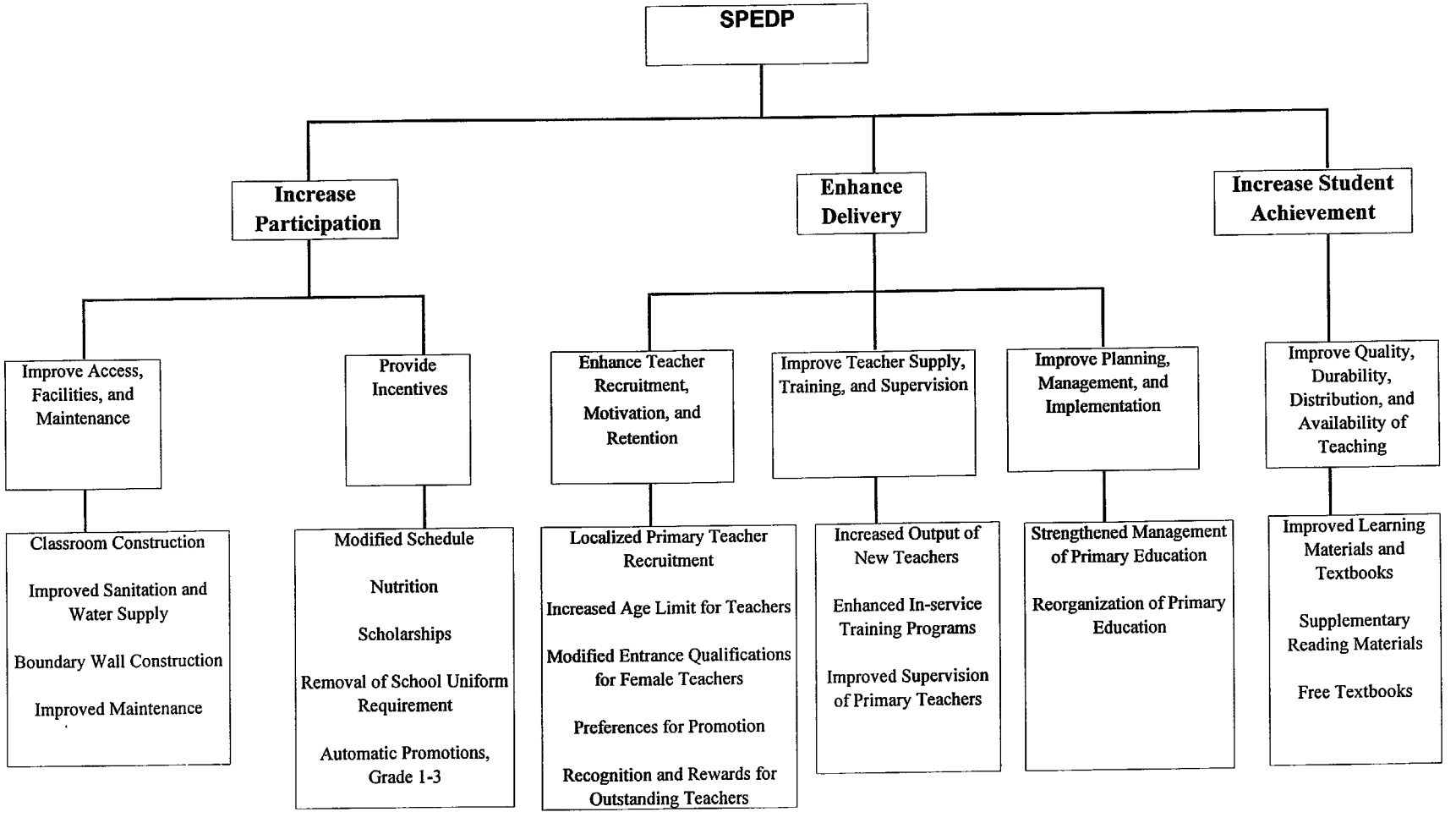
Key Features

The Sindh Primary Education Development Programme (SPEDP) is a comprehensive educational program, conducted from FY 1991-1995 with funding from the World Bank, Norwegian Aid (NORAD), the Overseas Development Administration, and the Government of Sindh (GOS). It was initiated to accomplish three goals: to increase participation in rural and slum areas, with an emphasis on girls; to enhance delivery of primary education; and to increase student learning and achievement (Overseas Development Administration n.d.; Hooper et al 1995; Government of Sindh 1995). In the program design, participation was to be increased by improving access, facilities, and maintenance and by providing incentives to improve enrollment and retention. SPEDP was expected to increase enrollment in Sindh government schools by about 538,000 students from 1990 to 1996, with a goal of doubling rural girls' enrollment (ODA n.d.). Delivery would be improved by introducing measures to enhance recruitment, motivation, and retention of teachers; improving the supply, training, and supervision of teachers; and improving planning, management, and implementation of primary education. Student achievement was to be enhanced by improving the quality, durability, distribution, and availability of teaching. The summary of SPEDP objectives and activities in Figure V.5 provides a visual of the breadth of the project and its many components. The various constraints and SPEDP's multiple interventions to address them are summarized in Figure V.6. The incentives, which represent a relatively small component of the entire program, are described below.

Pilot School Nutrition Program

SPEDP's pilot school nutrition program, which was implemented in various districts in rural Sindh, was designed to test whether a school nutrition program could be used in any or all of four ways: as an incentive to increase enrollment, retention, and regular attendance; to improve the nutritional status of primary school children and their younger siblings who often attend first grade; to increase parental and community awareness of the importance of child nutrition through local community management of the program; and to improve student achievement (The World Bank 1990). Program design and management were based on data collected through professionally conducted field surveys. The program emphasized two innovative elements: the use, wherever possible, of local, nutritious food; and local level management by parents/village workers, and school and other local staff, with assistance from Aga Khan University (AKU) or other competent NGOs. The program was monitored regularly to assess changes in weight-for height, skinfold thickness, health status, and school attendance and retention (The World Bank 1990).

Figure V.5
The Sindh Primary Education Development Program: Objectives and Related Activities



Secondary School Scholarships for Rural Girls

The GOS introduced a scholarship program to help counter the high opportunity cost to parents associated with sending their daughters to secondary school and to help the girls who completed primary school to continue on to secondary school. SPEDP financed 1,500 scholarships of 100 rupees per month for rural girls to attend middle and secondary school. This represented a 12 percent income supplement to a rural family with an annual income of 10,000 rupees.

Figure V.6
SPEDP: Addressing Educational Constraints for Girls

Constraint	SPEDP Intervention
Poor physical facilities schools	New schools and new classrooms in rural mosque Addition of toilet facilities
Inadequate learning materials	Improved production, distribution, and quality of teaching learning materials
Less provision of separate schools for girls	Equipment and boundary walls for girls' schools
General poverty of the masses	Scholarships, free books, and alleviation of uniforms
Difficulty in recruiting female teachers for rural schools	Localized primary teacher recruitment; relaxed age requirements for teachers
Inadequate school-community interaction	Training of parent/village workers and existing school and other staff
Lack of incentives for parents to send their girls to schools	Scholarships for those who complete grade 5; pilot feeding program; free books
Early marriages/purdah considerations	Scholarships for completing grade 5 and entering secondary school

Abolition of School Uniform Requirement

Although not always enforced in poor areas, the compulsory school uniforms were the highest school expenditure item for parents, and therefore often acted as a disincentive to parents to send their children, particularly the girls, to school. The GOS agreed to abolish the requirement for school uniforms for primary school children in rural areas.

Flexible School Calendar and Scheduling

The GOS confirmed its intent, in time for the beginning of AY 1990-1991, to change the timing of the school calendar from April-March to August-May in order to eliminate the interruption to the school term during the hot vacation months of June and July. To help minimize the tardiness and low attendance due to the heavy load of daily family and farm chores on school-age girls and boys, particularly at their peak during harvest, and the long distances that urban teachers had to travel daily in order to teach in the rural areas, GOS experimented with flexible school hours and vacation schedules in 150 selected schools.

Promotion Between Grades

In Sindh there was no set policy to provide formal end-of-grade examinations, and practices varied between districts and individual schools. Examinations, which were set by the schools under the supervision of the supervisor/learning coordinator, were not standardized or pre-tested and therefore were not consistent. Children who failed the examination often repeated the grade, although there was no uniform provincial standard or policy regarding grade promotion. The GOS eliminated the subjective examination, provided automatic promotion between grades 1 and 3, and developed and introduced achievement testing as part of the curriculum to monitor individual and cohort student achievement.

Program Implementation

The Education Department of the GOS implements the program. The staff consists of a Project Director, a Project Manager, and two section officers (one for Disbursement and the other for Coordination). This head office has links with the Divisional Directors of primary schools, to whom the District Education Officers (DEOs) are answerable. DEOs issue instructions to the Sub-divisional Education Officer, who controls the Supervisors of Primary Education (SPEs) and Learning Coordinators (LCs). The SPEs and LCs are the first instructional supervisors to the primary level teachers.

The Sindh Education Management Information System (SEMIS) provides statistical and computer facilities to the project. The pilot nutrition program for schools is implemented by a respected NGO under the supervision and monitoring of Aga Khan University/Karachi. The Sub-divisional Education Officers supervise and report on the nutrition program to the Field Coordinator of Aga Khan University.

Cost Information

A total of US$196.4 million was allocated to the Sindh Program over a five-year period (Hooper et al 1995). This program was largely funded by four major donors. Funders and amounts provided are summarized in Figure V.7. As is evident in that figure, the incentives portion of SPEDP—to include the scholarships, nutrition program, and the free textbooks—funded by NORAD is $6.6 million which is only three percent of the total program budget.

Figure V.7
SPEDP Program Funding, by Donor Agency

Source	Component Funded	US $ in Millions	Rs. in Millions
International Development Association	School construction and modification Module production	US$112.5	Rs. 2448.126
Norwegian Aid	Nutrition, scholarships, and textbooks	US$ 6.6	Rs. 143.623
Overseas Development Administration	Materials upgrading, development, production, and distribution Management training Teacher training/incentives	US$ 2.2	Rs. 47.874
Government of Sindh Investment	Management	US$ 75.1	Rs. 1634.270
Total	-	US$196.4	Rs. 4273.893

Source: Hooper,et al 1995.

SPEDP Program Results

The program had a slow start, with only 51 percent of the total program financing disbursed by March 1995 despite an original 1994 end date. Priority was given to school construction in areas of need (The World Bank 1990), and thousands of schools were constructed and/or repaired. Boundary walls, and toilet and water facilities were added. Development of the supplementary learning materials, modules, and textbooks moved slowly. Nevertheless, project implementation of most components was satisfactory, and disbursements improved over time.

Reviews of various aspects of the Sindh program conducted for NORAD (IMTEC n.d.) and ODA (ODA n.d.) reveal that the incentives efforts had mixed success. The scholarships proved difficult to administer during the first years of implementation. Of the 6,455 targeted for the five-year effort, only 359 checks had been issued as of March 1995 (ODA n.d.). The pilot scheme to start the school year in August after the hot season was abandoned after two years because the public preferred the original school starting date. Free textbooks were distributed to about 178,000 rural girls in 1992 (ODA n.d.). Schools received 643,458 books by the end of 1993 (the claim for payment was for 982,391 books) (IMTEC n.d.), and the Sindh textbook board completed the printing of 10 titles of supplementary reading materials. Due to persistent irregularities in program implementation, however, the program was suspended in 1994. In addition, as reported by IMTEC (n.d.), spot checks at schools indicated that the distribution of free books did not have any major impact on girls' retention and enrollment. "The fact that there was not a single reaction to suspension of the program in 1994 also indicates low impact."

The nutrition component, which was managed by the Aga Khan Institute, showed more promise. Pilot programs established in more than 30 schools showed sustained increases in enrollment (ODA n.d.). NGOs trained the PTAs to run the programs, and implementation went well. As also reported by ODA, the program was appreciated by parents, students, and teachers and was effective in building planning and problem-solving capabilities in the parent community. PTAs were inspired to undertake other activities outside of the nutrition program on their own.

In terms of overall program impact, girls' primary school enrollment data before and during SPEDP implementation years indicate that there was an increase in girls' enrollment (see Figure V.8). Girls' enrollment increased between 5 and 10 percent during the first years of the program (1991-93), during a period when population growth rate was only 3 percent.

Figure V.8
Girls' Primary School Enrollment in the Sindh Province, 1984-1993

Year	Enrollment
1984-85	499,731
1985-86	506,776
1986-87	502,761
1987-88	507,691
1991-92	641,790
1992-93	699,071

During informal interviews, program planners and administrators indicated that SPEDP, with its various incentives (including even school dresses given to the primary poor students in 1992), contributed to increases in girls' enrollment of about 5 to 10 percent in

primary and secondary schools. They suggested, however, that the increases were not significant enough considering the many different program components. Some attributed changes to teachers' efforts to recruit girls rather than to the program. Other administrators reported that although parents were still reluctant to enroll their daughters in boys' primary schools, the attendance of those girls who were already enrolled and received free books or scholarships mostly remained stable or increased, and correspondingly, the dropout rate decreased. Teachers and administrators summarized that the entire program made only modest changes in girls' enrollment but had more effect on girls' retention.

DISCUSSION

SPEDP is a comprehensive package of interventions that addresses a variety of access, quality, and demand issues related to children's, and particularly girls' education. Priority was given to improving the infrastructure of the educational system, i.e., constructing and improving schools and improving teachers. Some of these activities, such as the addition of boundary walls and improved sanitation and water supply, began to address some of the cultural barriers to girls' education. The package of incentives, which included the modified schedule, school feeding, scholarships, and removal of the school uniform requirement, appears to have been intended to motivate parents to send their daughters to school by reducing the cost to the family associated with educating the daughter. This package was a small component of the total effort, both in terms of allocated funds and program effort. Most of the incentives focussed on improving primary school enrollment and attendance, with one incentive—scholarships for secondary school girls—that encouraged completion of primary school and continuation into secondary school.

Is the SPEDP Incentive Program Effective?

The limited data available suggest that SPEDP contributed to modest gains in enrollment, and perceived but largely undocumented improvements in girls' attendance and retention. Because of the comprehensive nature of the program, it is difficult to say how much of these improvements can be attributed to any one program activity, including the provision of various incentives.

What Elements Contributed to Program Effectiveness?

In a country where the barriers are varied and complex, a comprehensive approach to encouraging girls' participation seems to be a logical step. Expectations are high for significant improvements. Yet this did not appear to be the case. This section focuses on the effects of the incentives on the overall effort.

The individual incentives had varying degrees of success. Although the flexible school time and vacation schedule were considered favorable factors in girls' participation, the parent response and the resulting return to the original schedule suggest that scheduling was not as important a factor in Sindh as might have been perceived. The school feeding

program, where parents were trained to implement the program, was very well received and apparently successful in increasing enrollment and attendance. Little was reported about the relaxed uniform requirement. The NORAD-sponsored assessment of the incentives initiatives described the textbook distribution as a failure (IMTEC n.d.). To be more effective, the authors concluded that the program would need to be more widely publicized to parents, children, and teachers, books would have to be distributed in a more timely fashion, and complete sets of books would need to be provided.

The scholarships were to be made available to girls in every district of the Sindh Province. Unfortunately, as previously stated, only 359 of the anticipated 6,455 scholarship checks were issued by 1995. It is difficult to determine at this time what type of impact the scholarships might have had on overall effectiveness. Nevertheless, including scholarships as a part of the comprehensive approach appears to be a step in the right direction. Teachers, parents, and students who were interviewed generally were positive and enthusiastic about the scholarship distribution.

With the exception of the nutrition pilot test, the incentives and the other program components show little evidence of three elements that help to change parent/community attitudes about and behavior related to girls' education: person-to-person contact with community field staff; awareness-raising activities to communicate the importance of girls' education; and parent/community involvement in program implementation. In a country where cultural beliefs and traditions work so strongly against girls' participation, these types of activities, perhaps, should have been incorporated.

This case study suggests that the success of a comprehensive approach with multiple funders such as this is at least somewhat dependent on careful coordination and cooperation. For example, it was reported that school construction and materials production were much delayed, and almost half of the funds were not disbursed until the last year of the program. This type of delay may have affected the implementation of other components and limited the systemic change that was anticipated. The scholarship and textbook distributions also were delayed and perhaps did not coincide with other interventions. By 1994, due to delays in project start-up and implementation, funds originally set aside for certain activities had been exhausted while others remained unspent (IMTEC n.d.). Several of the parents and community members who were interviewed for the case study indicated that the distribution of free books was a good step for girls' education but not an ultimate step. To be more effective, they suggested that the book distribution be coupled with more schools and teachers, distribution through Parent-Teacher Associations, and the employment of more teachers from the same community. Because at least one of these elements was in fact included in SPEDP, one might infer the need for either more careful coordination or more broad-based inclusion. One also might infer that programs that address supply-side issues such as more books or more school places should address cultural and other demand issues such as parent involvement and a sense of community ownership as well.

The case study results also lead the reader to consider the importance of NGO involvement. SPEDP had multiple funders, with all monies with the exception of the nutrition program funds, channeled through the GOS's primary education sector. Again, it was the nutrition component, which was administered by Aga Khan University, that reported specific, documented results in terms of improvements in girls' participation. Interviewees also described the nutrition component as one that was well administered. One of the goals of SPEDP was to improve the Ministry's planning, management, and implementation capability, apparently to improve its in-house capability in order to handle the rapid increases in the size and complexity of the primary education sector. These observations might suggest that this Ministry needed assistance in processing and disseminating large sums of money and/or managing a very complex program.

Is the SPEDP Project Sustainable?

As in the previous case studies, sustainability depends on the benefits to be achieved. Although the school construction, school improvement, and teacher training activities perhaps cannot be continued indefinitely, the results of these efforts could be sustained because additional places would be available for girls in the community year after year and teachers would be better prepared to educate girls. Facilities maintenance and in-service or follow-up training would be less costly. If the scholarships prove effective in motivating more girls to complete secondary school, the impact on girls' education is likely to be sustained even further by creating educated mothers who are more likely to send their daughters to school and by building a larger pool of potential teachers and role models for other girls in the community. As a result, girls in the affected communities would be more likely to attend school in future generations even if scholarships are not available.

The nutrition program developed the human resources but not the financial means to generate long-term results. Parents, through organized PTAs, were trained to manage the program and successfully implemented the program in their respective communities. Nevertheless, the nutrition component did not generate a way to provide food independent of the funding source. Again, research (Levinger 1986) documents that when feeding programs are withdrawn, the dropout rate increases, with higher increases in dropout for girls. Sustainability of the nutrition component therefore seems to depend on the continued availability of food from an outside source.

The book distribution seems totally dependent on outside funding. Unless the various conditions for distribution, i.e., widespread publicity, timely distribution, and provision of full sets of books, can be guaranteed, sustainability may not be desirable.

What Are the Possibilities for Widespread Proliferation?

Through the World Bank, USAID, and other outside funders, programs to counter some of the access issues addressed by SPEDP, e.g., school construction, teacher training, and school quality, have been implemented in other provinces in Pakistan. This may be true

in other countries as well. It therefore may be possible to utilize a package of incentives in other situations where access has been or is currently being addressed, but girls' participation still lags behind that of the boys. Utilization of a package of incentives would require an early needs assessment in order to select the incentives that would be most effective in the particular community, district, or province. Implementation would call for careful coordination among the different incentive program managers and meaningful parent/community involvement to build commitment and encourage changes in attitude and behavior.

What Conditions Help Insure the Intended Results?

The information gathered for this case study suggests that a SPEDP-type package of incentives can be utilized in other situations if the following elements are present:

- a management structure within the ministry that has the resources and capability to manage a large-scale, multi-faceted project;
- all necessary resources and equipment provided in a timely manner: each person assigned to the project should have a clear concept of the project and what it involves;
- a sufficient number of scholarships and/or other incentives to provide the needed impact on enrollment and retention (emphasis should be placed not only on implementation but also on monitoring and evaluation from the start to track whether the desired goals are being achieved);
- incentive components implemented and monitored by an NGO and under the supervision of but with minimal interference from the Government Ministry; and
- funders who are willing to plan cooperatively, communicate regularly, and work consistently to maintain schedules for performance.

VI. CONCLUSIONS

The case studies presented in the previous chapters support the following conclusions concerning the three major research questions:

- What outcomes/results related to girls' school participation were evident from incentive program implementation?
- In what context can incentive programs be implemented?
- What features contribute to the effectiveness of an incentive program?

Outcomes/Results

Incentive Programs Correlate with Improvements in Girls' School Participation at the Primary and Secondary School Levels.

Case studies of incentive programs in Guatemala, Nepal, Haiti, and Pakistan show that incentives can improve girls' enrollment, attendance, and school-year completion. The level of impact may vary depending on a variety of other factors including but not limited to available funding and staffing, program design and implementation, and the economic, social, and cultural contexts in which the incentive is offered. Regardless of the circumstances surrounding the use of the incentive, however, program implementation resulted in immediate improvements in girls' participation in school. Because the programs in the case studies have been implemented relatively recently, it is too early to say whether the use of incentives affects girls' marriage age and fertility rates.

Incentives Have Shown More Demonstrated Effects on Enrollment and Attendance Than on Performance and Achievement.

Although the case studies support the use of incentives to increase enrollment and attendance, none of them links the use of incentives with significant changes in girls' school performance or achievement. This may be partially due to the fact that the criteria for participation in the programs highlighted in these case studies included enrollment and attendance requirements but not requirements for performance and achievement. In addition, none of the programs seems to have the improvement of girls' performance and achievement as the primary goal. Without analyzing performance or achievement-focussed incentive programs, it would be unwise to speculate about the effectiveness of incentives on these two areas. Nevertheless, it appears that in areas where improvements in girls' performance and achievement are desired, the conditions for participation in incentive programs might need to be expanded and the use of a particular incentive may need to be combined with other interventions and/or innovative classroom practices.

Incentive Programs Can Offer Results That Are Sustainable.

Sustainability is not just the funding of a program year after year, with continuity of staff and program activities. Rather, true sustainability is when any *improvements* that result from participation continue to have an impact after a program has ended. This position is supported by some current policymakers who argue that it is program *benefits*, rather than the programs themselves, that are to be sustained (Adams 1996). Using this train of thought, the critical question to answer in assessing the sustainability of any incentive program is not whether funding of a particular program can continue indefinitely but whether the girls who participate in the incentive program are able to complete either the primary cycle or the secondary cycle because of their participation and therefore will send *their daughters* to school even when an incentive program is no longer available.

Using this more progressive definition, incentive programs can bring about sustained results. Convincing World Bank research (King 1990) demonstrates that improvements in girls' education creates an *intergenerational impact* that is sustained beyond the life of the program. Once girls are educated, they are more likely to send their own children, particularly their daughters, to school. Further, other community members who observe the benefits of girls' education may be motivated to support the concept and encourage girls in their families to attend school as well. In addition, research by Floro and Wolf (1990) shows that primary education for girls leads to greater participation in the work force, more nonmarket and home production, more wage employment opportunities, higher productivity, and higher wage earnings, thus improving their future ability to support their own daughters' education. Years of mothers' education also correlate with lower rates of infant mortality and child morbidity (King 1990). Therefore, even if the immediate desired behavior (i.e., girls enrolling and attending school), ceases when funds are no longer available, changes in education and other social indicators would be sustained.

In short, although there is little evidence to show that incentive programs themselves are sustainable indefinitely without external funding, *research suggests that the outcomes of the incentive program, i.e., increases in girls' enrollment, attendance, and completion rates, are sustained into future generations if participating girls complete an educational cycle.* This is in addition to improvements in the various social indicators such as infant and child mortality, fertility rates, and economic productivity.

Incentives May Continue to Improve Girls' Participation Over a Period of Years.

One of Kohn's (1993) concerns about the use of incentives is that even rewards that are presented on a regular basis no longer motivate girls and/or their families after the incentives have been distributed for several years. Trends concerning the long-term impact of the use of an incentive were inconsistent in the case studies that were studied. In Guatemala, for example, girls' school year completion rates at the primary level remained above 95 percent for the six years that data were reported despite changes in funding and resulting reductions in the number of scholarships that were awarded.

Dropout rates actually decreased during the years of program implementation. In Nepal, however, changes in enrollment over the previous year did fluctuate, with the largest increase reported during the first year of program implementation. These observations indicate that incentives can be effective over time but also suggest that further research is needed to pinpoint the conditions under which the effects are more likely to be continuous.

Context

Programs That Acknowledge the Economic and Cultural Contexts Are More Likely to Be Successful.

Findings from the case studies included in this report support the premise of Chapman, Snyder, and Burchfield (1993), that "the incentive value of any particular reward is relative to the context in which it is offered. . .Things that motivate under one set of cultural, economic, and professional conditions may not do so in another" (p. 315).

The economic situation seems to be one of the most important contextual variables that influences the effectiveness of an incentive program. In the four case studies, the countries where the incentives were used are low-income countries and are among the poorest in the world. With one exception, GNPs for the targeted populations were less than US$ 400 per year.

These targeted groups seemed to be motivated by tangible, need-oriented incentives. In Guatemala, where Chesterfield and Rubio (1995a) tested several incentive packages, the largest gains were experienced when scholarships were a part of a total program that was responsive to a variety of social and cultural needs. In Nepal, the country with the lowest per capita income of the four case study countries, the program also offered scholarships. In Haiti, where poverty and related nutrition and health issues were serious concerns, the feeding program reportedly motivated parents to send their girls to school. *This evidence suggests that incentives that create an opportunity to meet a basic need can motivate parents to send their daughters to school.*

Sensitivity to the cultural context is also crucial. In Guatemala and Nepal, where traditional beliefs about the girl's role in society and the importance of school were barriers, local staff who could relate to the community were essential to the program's success. In the Pakistan case study, on the other hand, despite the restrictive culture for girls and the community's reluctance to send them to school, the reform effort seemed to focus on school construction and other supply-side strategies, while cultural barriers appeared to have been given lower priority. Gains were not as impressive.

Incentives Are More Likely to Be Effective in a Political Environment That Legislates Educational Participation by Girls.

In three of the four countries highlighted in the case studies, children's—boys' and girls'—school participation is mandated at least to grade 5. Correspondingly, primary school enrollment rates in those countries are at least 57 percent and as high as 80 percent. In Pakistan, the only country where education is not compulsory, the female primary school enrollment rate is 28 percent, and its secondary school gross enrollment rate is at least 5 percent lower that the rates of the other three countries included. In Sindh, even with the comprehensive program that was implemented, enrollment gains were modest. *These observations suggest that the presence of national laws requiring education for all are needed in order to maximize the level of impact that an incentive or even a package of incentives might have on girls' participation in school.*

Incentive Programs Are More Likely to Be Effective If Implemented with Specialized Populations.

A review of the cost information included in the case studies suggests that the administrative and support costs associated with managing or administering an incentive program together with the actual cost of the incentive itself make the use of incentives a relatively expensive venture over extended periods of time for large groups of people. Therefore, incentive programs are more likely to be effective if implemented with a small, identifiable target population, for example, a very disadvantaged group that might need a leg up in order to make conditions more equitable with those of other people in the society (Chabbott 1996).

Features

Incentive Programs Are More Likely to Be Effective If They Include a "Critical Mass" of Program Elements for Increasing Girls' Participation.

The complex web of economic and cultural barriers that influence girls' enrollment, retention, and completion dictates the need for a comprehensive approach to improve girls' participation. Low family incomes and the costs associated with sending girls to school seem almost to require some type of financial incentive. The presence of cultural barriers, however, such as early marriage, traditional domestic roles for girls and women, long-standing beliefs about the limited importance of education for girls, and restricted movement for girls outside the home call for various other program elements to support the financial incentive. Because parent acceptance of girls' education influences their participation, incentive programs are more likely to be effective if they include strategies or components that help change parent attitudes about the importance of girls' education and help address some of the cultural barriers.

In Guatemala, the promoter helps overcome parent reluctance to send daughters to school by providing academic support and role modeling to the scholarship recipients and by raising the awareness of and providing counseling for the parents. Parents are involved in program planning and implementation, thereby increasing their understanding of the program and their commitment to its success. The community-oriented women who speak the local language serve as intermediaries between the school and the community. AGES addresses the cultural practice of early marriage by providing family life education and planning. In Nepal, the program support elements included improved physical facilities that made the school structures more acceptable for girls, parent awareness activities stressing the importance of girls' education, and training for girls to prepare them to manage their own money and be more independent. In Pakistan, the package of cost-oriented incentives, e.g., scholarships, free books, and food, was a part of a comprehensive improvement effort that focused on *supply-side* solutions such as school construction, teacher training, and materials development. Minimal awareness raising and culture-specific activities were reported. Again, this program experienced modest results. *Evidence seems to indicate that support elements are likely to be effective in attracting girls to school if they address the barriers that reduce the parents' desire to send their daughters to school.*

It is interesting to note that the incentive programs featured in the case studies included no mention of the use of symbolic rewards such as stars, certificates, and give-aways or of less tangible incentives such as public recognition, although these minimal-cost incentives have been shown to improve participation in industrialized nations.

Incentive Programs Are More Likely to Be Effective If Interpersonal Contact and Meaningful Community Involvement Are Part of Program Implementation.

A review of the case studies indicates that chances of success will increase when two conditions are present: locally-selected field staff provide personal contact; and parents are made partners in program planning and implementation. Through one-on-one interactions, promoters, field supervisors, and others can bridge language and cultural gaps, raise parents' awareness about girls' education, and support parents as they begin to accept "nontraditional" behaviors for themselves and their daughters. Again, this approach appeared to be effective in Guatemala and Nepal. Effectiveness seems to depend on careful screening and selection of the field workers, together with appropriate training, regular follow-up, and sufficient numbers of field workers such that they can be assigned to small groups or individual communities. *From these programs featured, it appears that the interpersonal interaction and activities that begin to address parent/community attitudes are important to program success, particularly in areas where populations are separated by language or culture from the dominant, educated group.*

Meaningful community involvement provides a vehicle for future action and decision-making, and helps to build parent/community commitment. The AGES scholarship

program in Guatemala and the school nutrition component of Sindh demonstrate what can happen when parents and communities are involved in meaningful ways.

Incentive Programs Are More Likely to Be Effective If There Is Guaranteed Funding for at Least a Primary School Cycle.

A guaranteed funding source is needed to ensure that the needed staff and resources are available to implement the program and that the incentives can be provided for at least one school cycle. This allows time for a community to become aware of the program and for implementors to build support and acceptance. It also allows at least one group to complete primary school, which will help insure that the integenerational effects will occur.

Incentive Programs Are More Likely to Be Effective If a Local Organization Is Involved in Program Implementation.

The nature of governmental agencies, with bureaucracies, changeovers, and limited resources, makes it difficult for ministries to distribute incentives. An alternative approach is to have the incentive program administered and implemented by a local, established, and trusted organization that can distribute the incentive and closely monitor implementation to minimize misuse.

In the case studies that were featured, the involvement of an established local NGO stood out as important. AGES and FESP had funds channeled to the recipients through a local NGO, and feedback from participants was positive. For SPEDP, on the other hand, funds were provided to the Government of Sindh, which was responsible for administering the program and distributing the incentives with the exception of one small component of the program. In the results, the aspect of the SPEDP program that was perceived as working most effectively was the nutrition component that went through an NGO, the Aga Khan University.

NGOs or other organizations should be carefully selected, however. A recent study of Mayan perceptions of public and private sector involvement (Nieves and Solis 1995) found that the indigenous community is reluctant to accept private sector involvement in girls' education. The community is more accepting, however, of organizations that have a sense of social responsibility, conduct the work honestly, openly, and clearly, meet their promises, demonstrate their commitment to the community with a permanent presence, and provide assistance that benefits the entire community rather than any one particular segment of that community. Religious organizations and other cooperatives were found to have greater acceptance than NGOs. The communities did indicate that providing funds for more teachers, materials, construction projects, or economic assistance to families are roles that the private sector could play to "complement and strengthen the government's educational services." *Organized collaboration among the private sector, public government sector, and the school and community was perceived to have more opportunity for success than isolated or independent activities* (Nieves and Solis 1995).

INCENTIVES AT WORK

PRIMARY LEVEL SCHOLARSHIPS
(GUATEMALA)

SECONDARY LEVEL SCHOLARSHIPS
(NEPAL)

SCHOOL FEEDING
(HAITI)

INCENTIVES AS PART OF
AN INTERVENTION PACKAGE
(PAKISTAN)

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